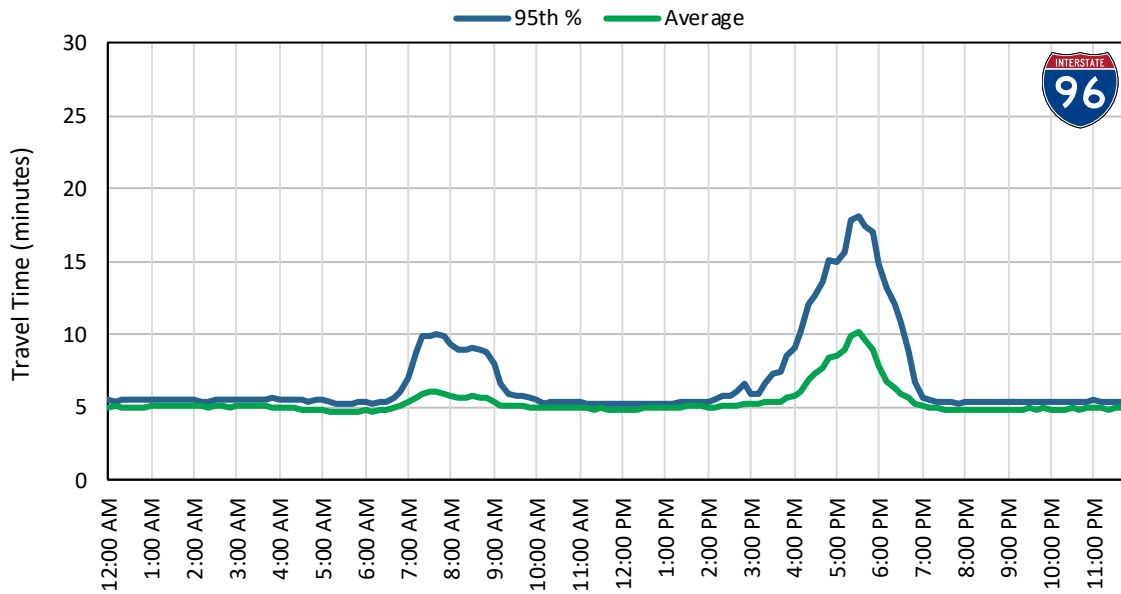
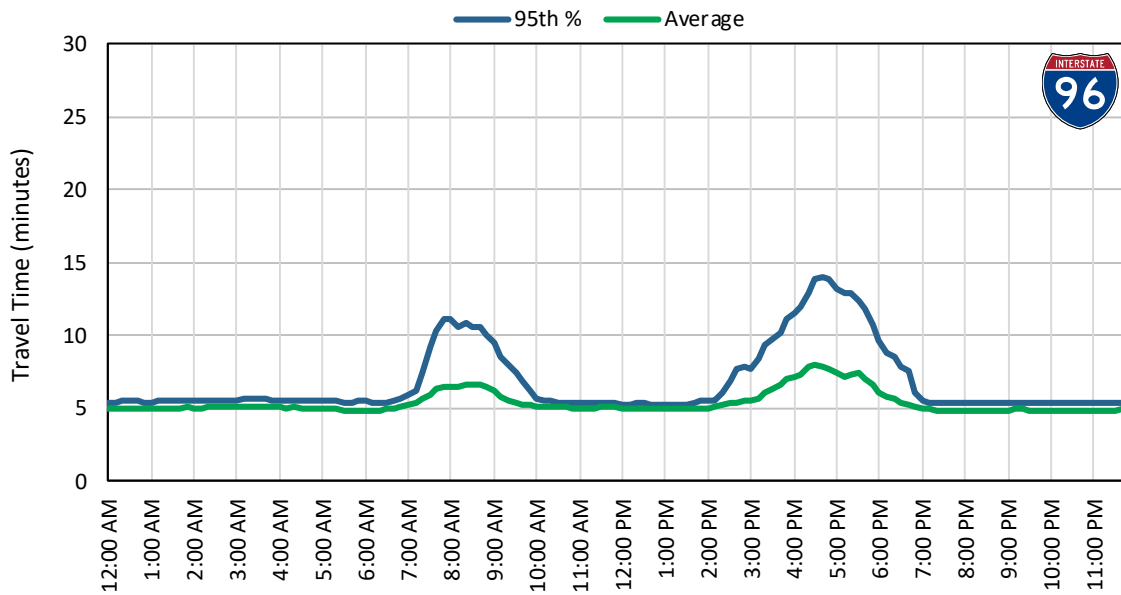




## I-96: TRAVEL TIME RELIABILITY



a) Eastbound

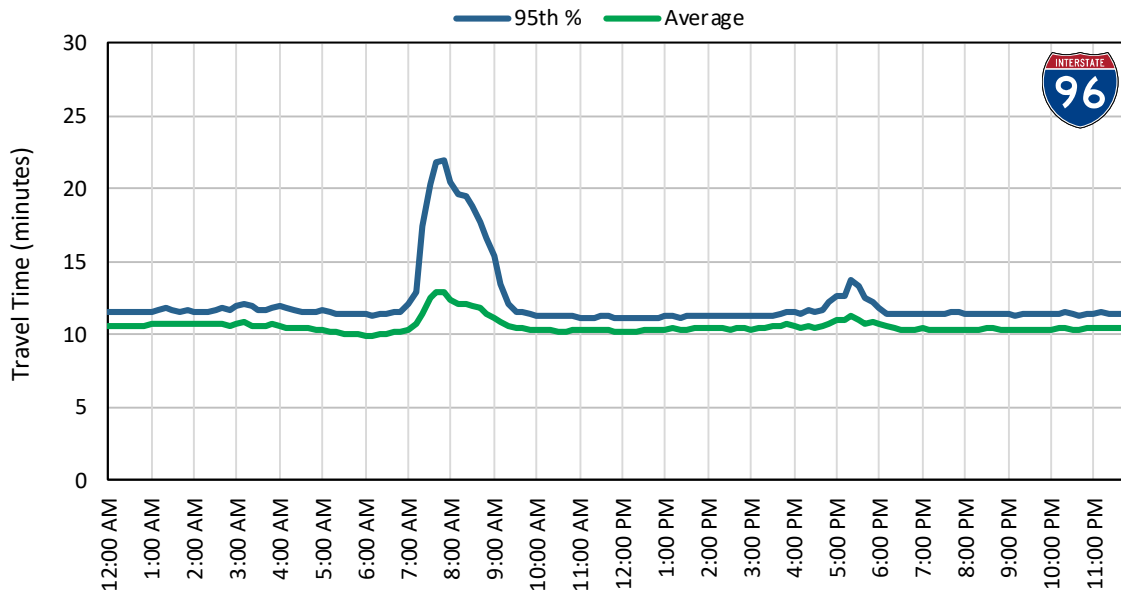


b) Westbound

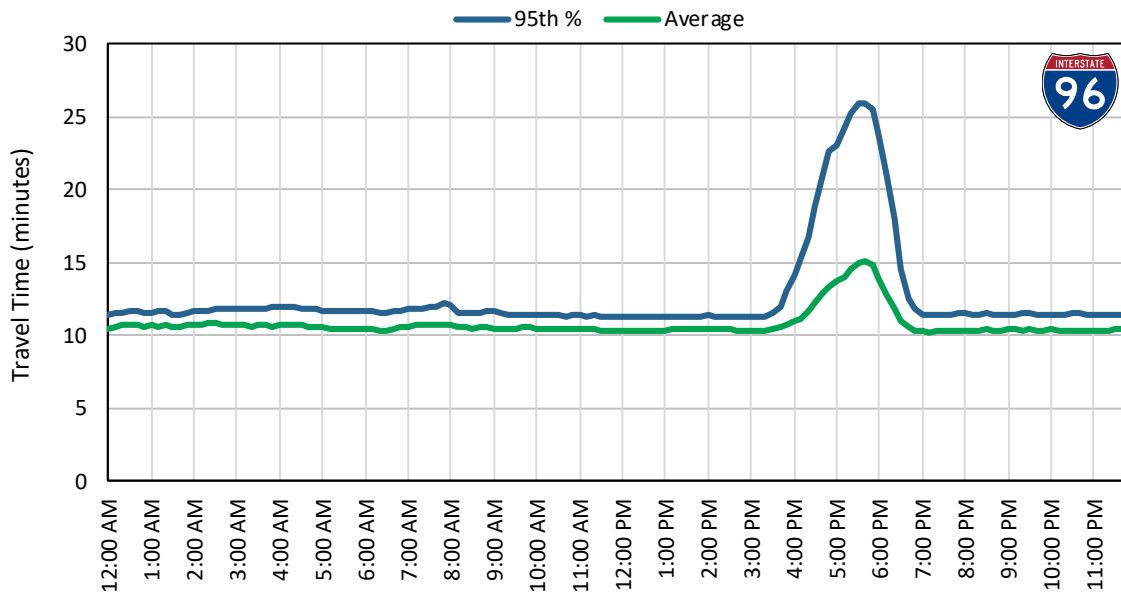
**FIGURE 51. Segment 2 - I-96 between I-696/M-5/Exit 165 and I-275/M-14**



## I-96: TRAVEL TIME RELIABILITY



a) Eastbound

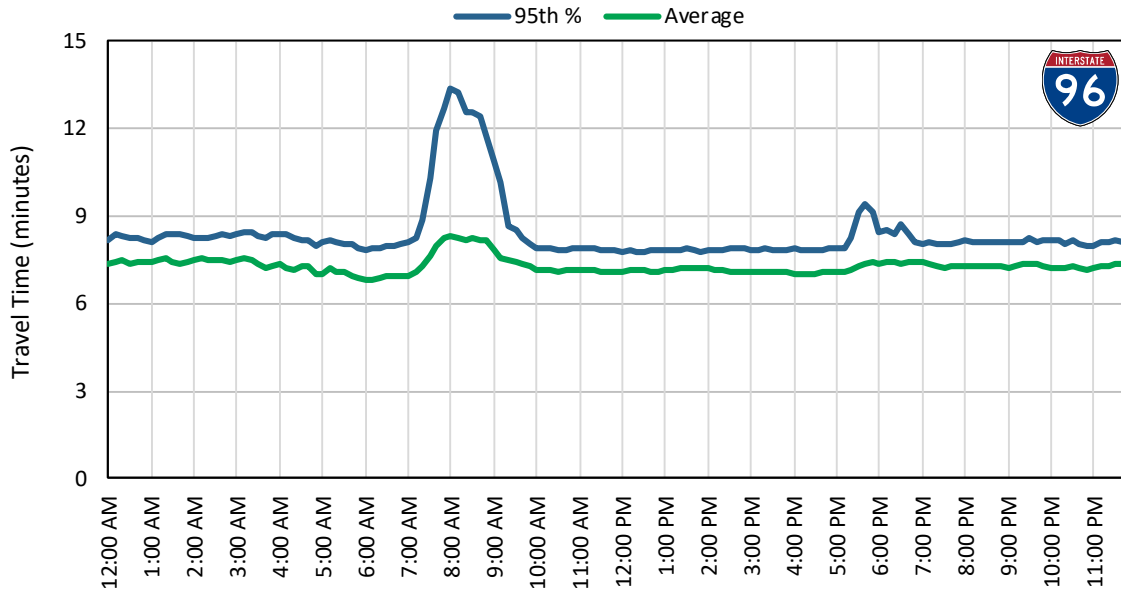


b) Westbound

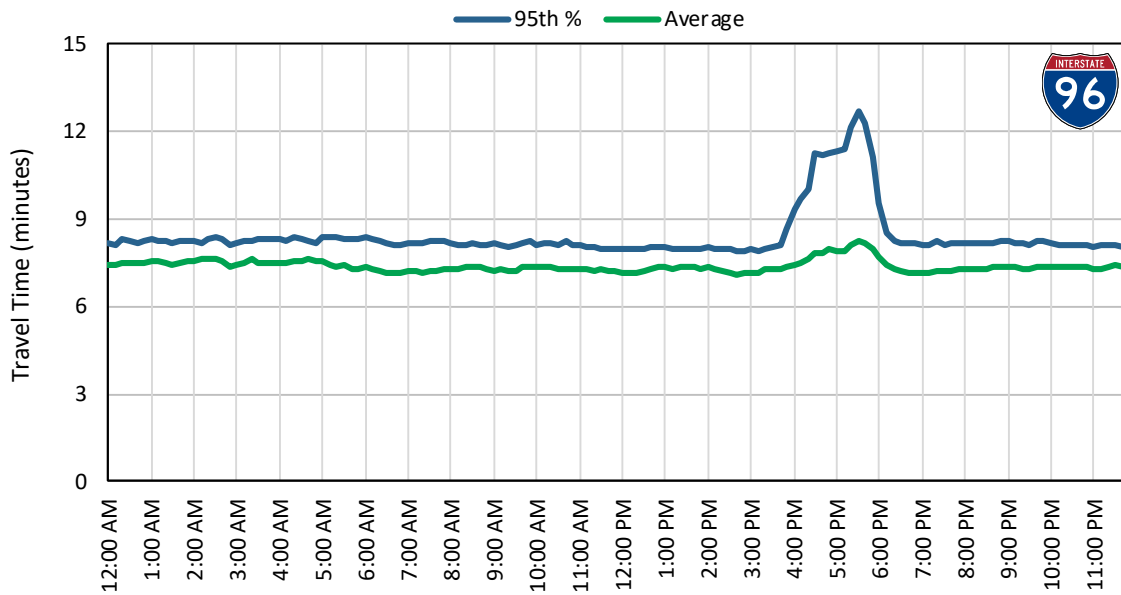
**FIGURE 52. Segment 3 - I-96 between I-275/M-14 and I-96 LOCAL/M-39/Exit 183**



## I-96: TRAVEL TIME RELIABILITY



a) Eastbound



b) Westbound

**FIGURE 53.** Segment 4 - I-96 between I-96 LOCAL/M-39/Exit 183 and I-75



## I-96: LEVEL OF TRAVEL TIME RELIABILITY

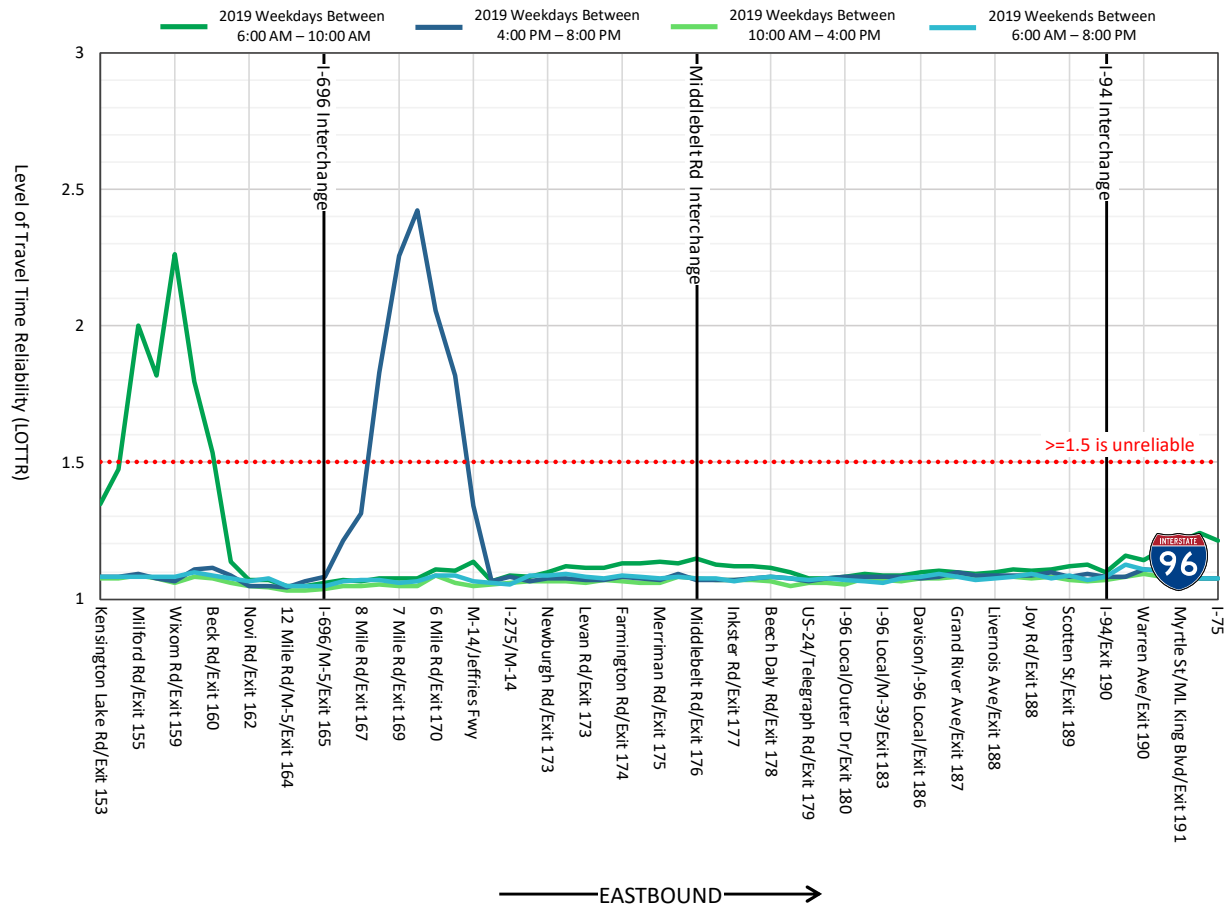


FIGURE 54. Metro Region Eastbound I-96 Level of Travel Time Reliability





## I-96: LEVEL OF TRAVEL TIME RELIABILITY

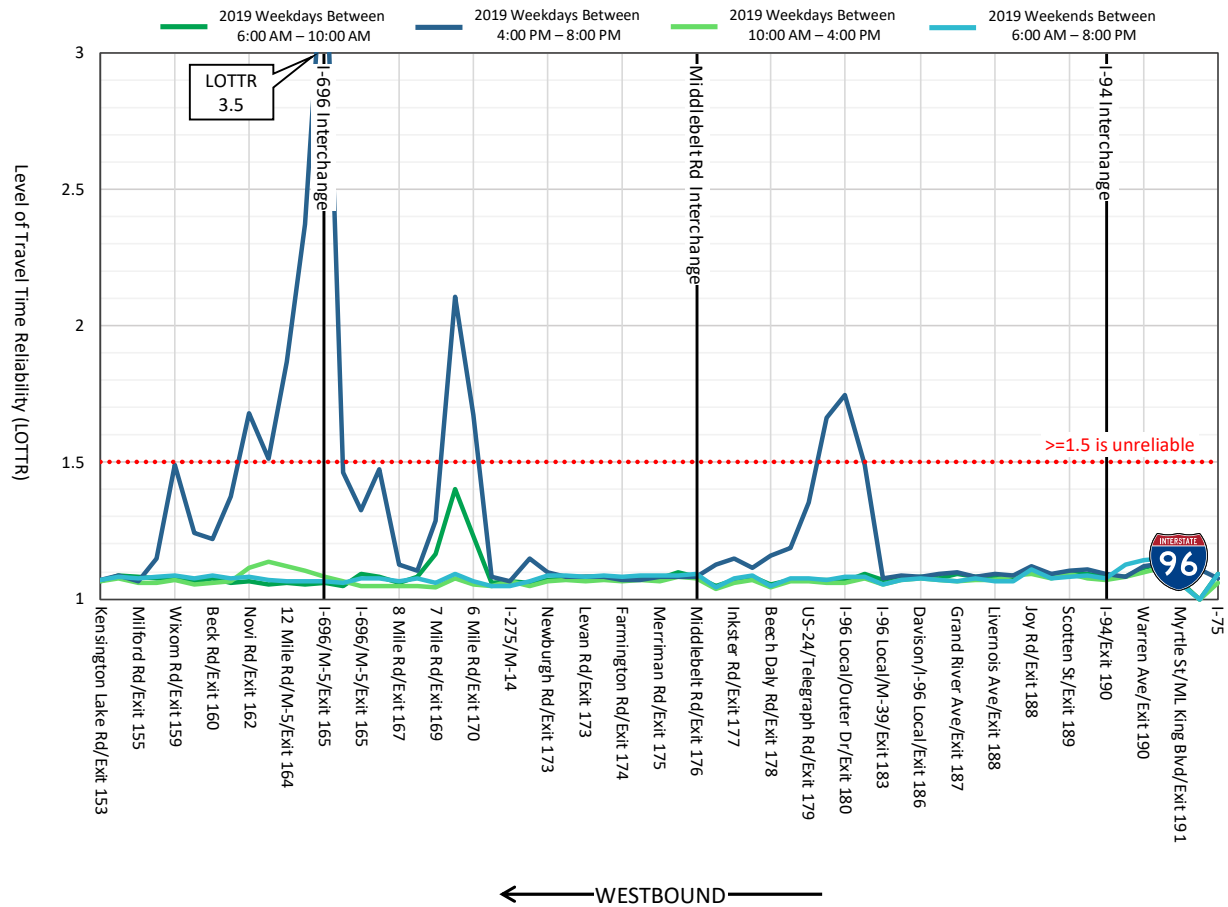
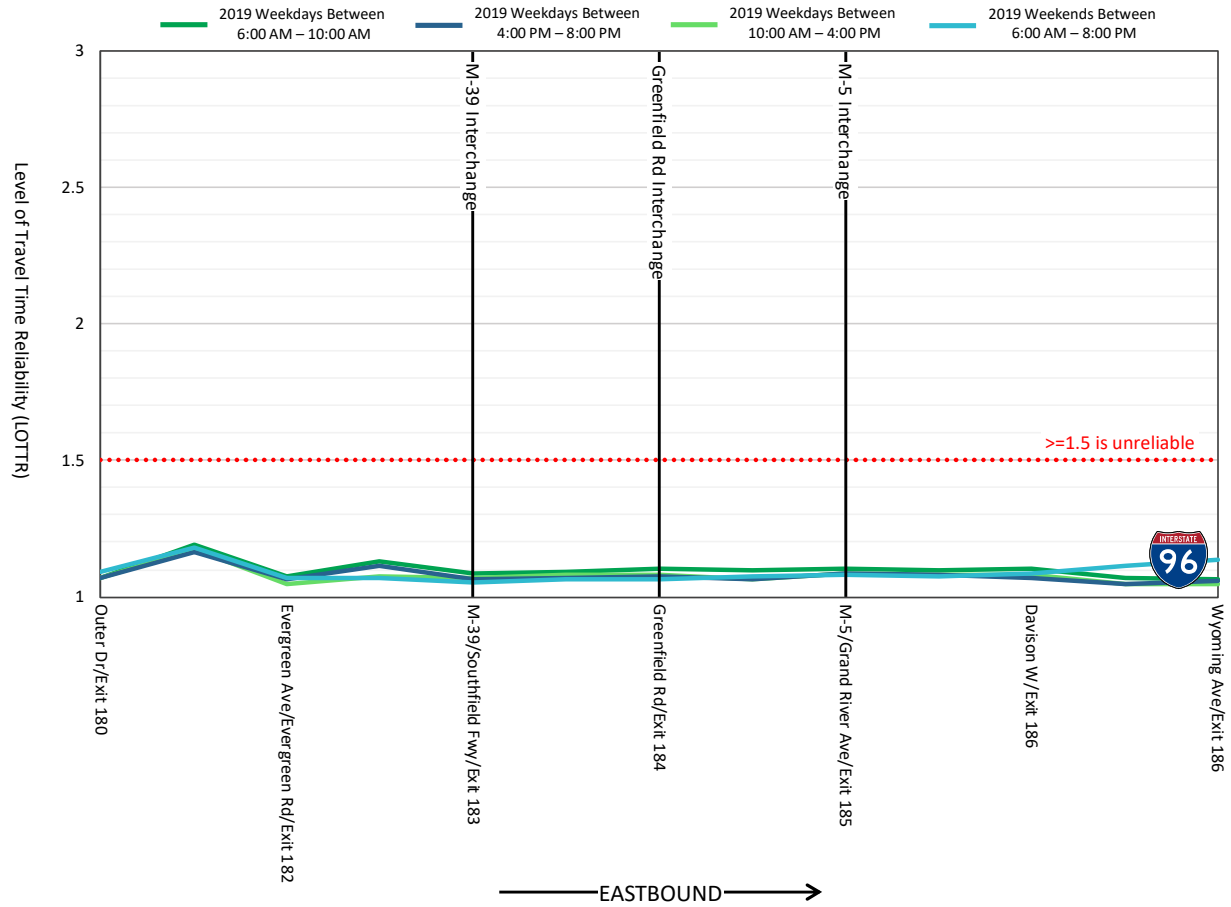


FIGURE 55. Metro Region Westbound I-96 Level of Travel Time Reliability



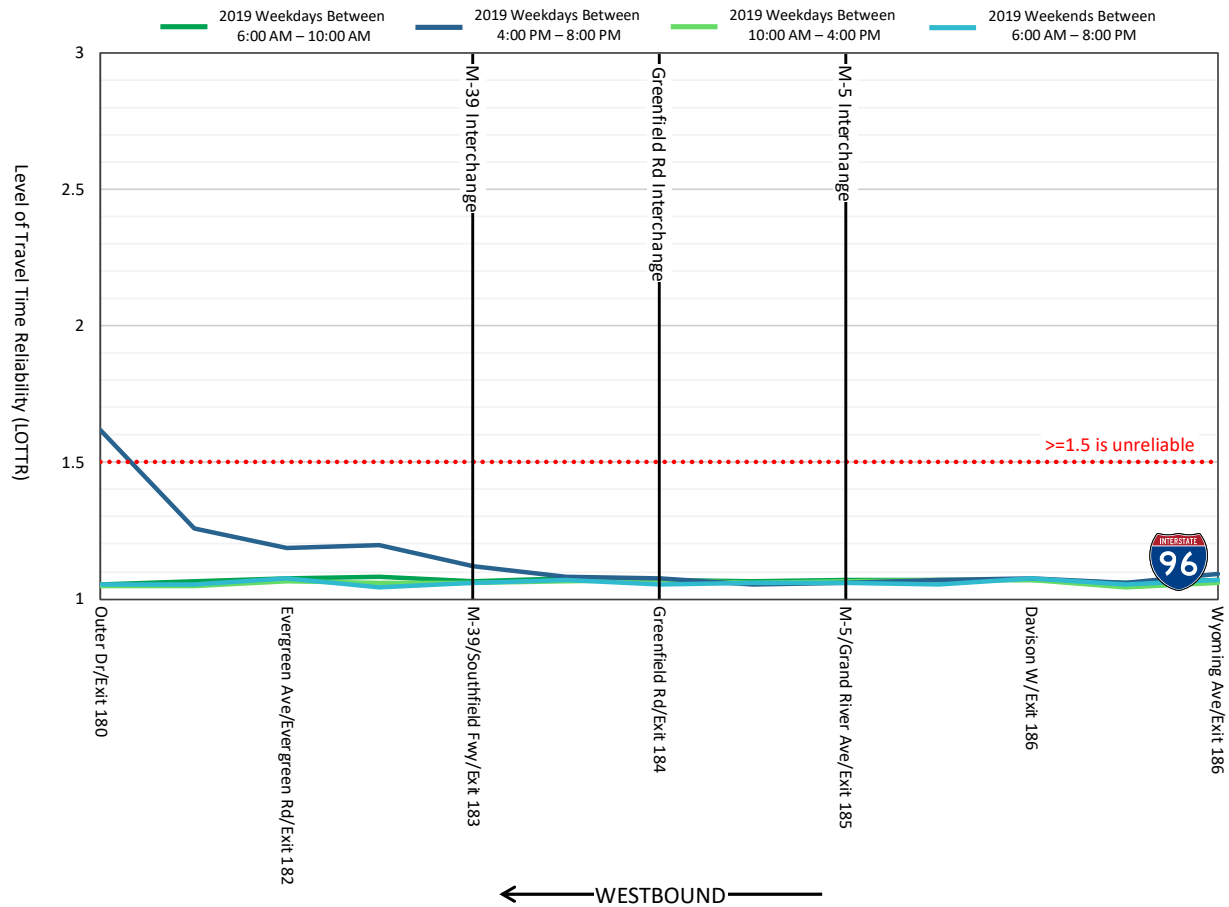
## I-96 LOCAL: LEVEL OF TRAVEL TIME RELIABILITY



**FIGURE 56. Metro Region Eastbound I-96 LOCAL Level of Travel Time Reliability**



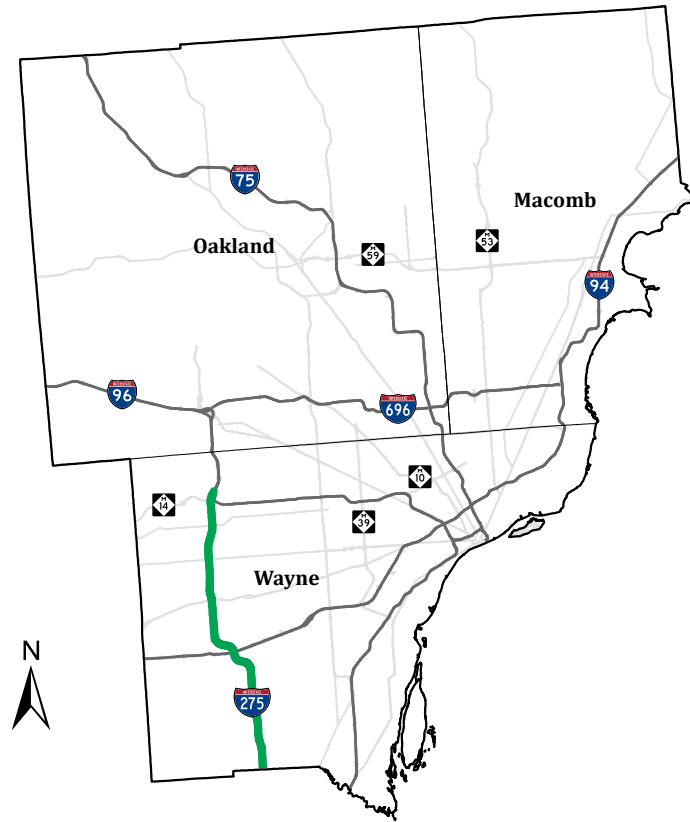
## I-96 LOCAL: LEVEL OF TRAVEL TIME RELIABILITY



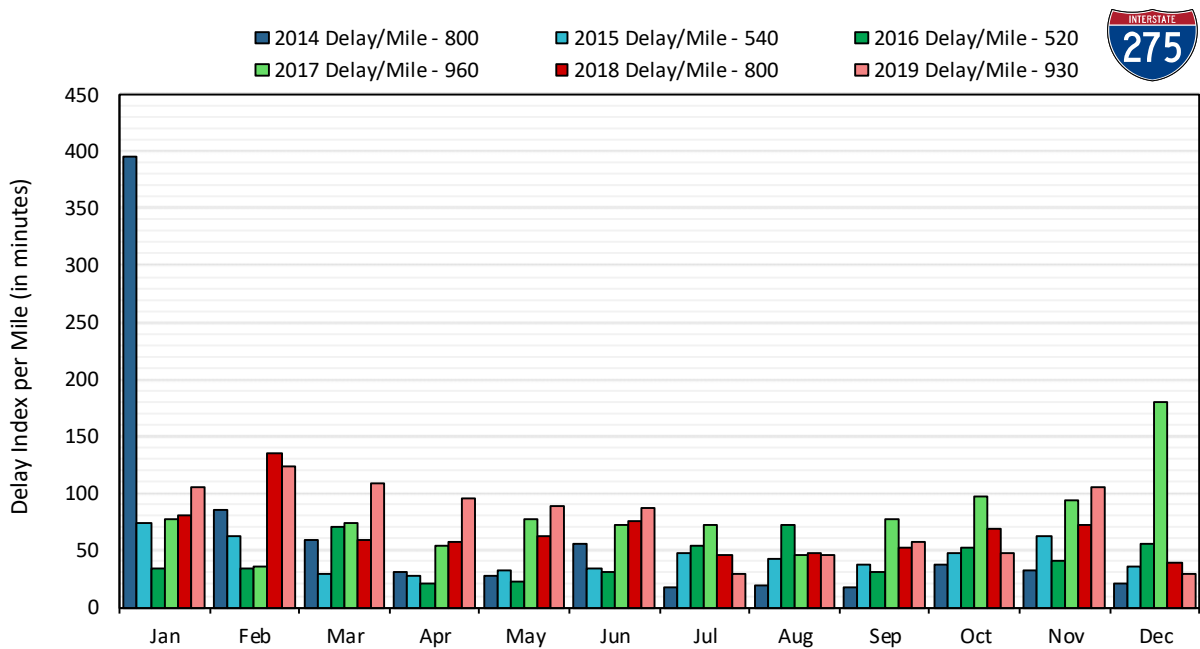
**FIGURE 57. Metro Region Westbound I-96 LOCAL Level of Travel Time Reliability**



## I-275: TAYLOR TSC DELAY INDEX



a) Segment Map



b) Delay Index Graph

**FIGURE 58. Taylor TSC I-275 Corridor Delay Index**



## I-275: AVERAGE SPEED

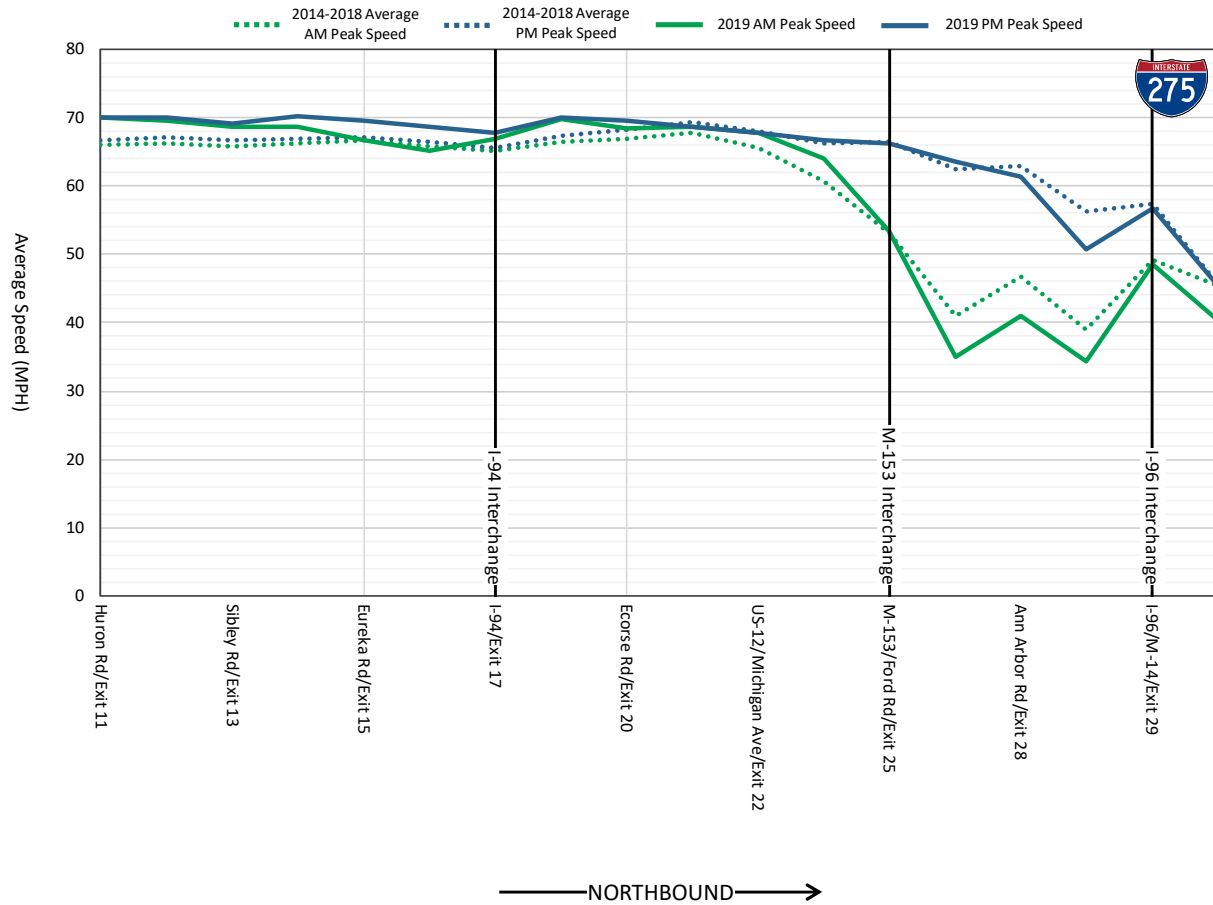
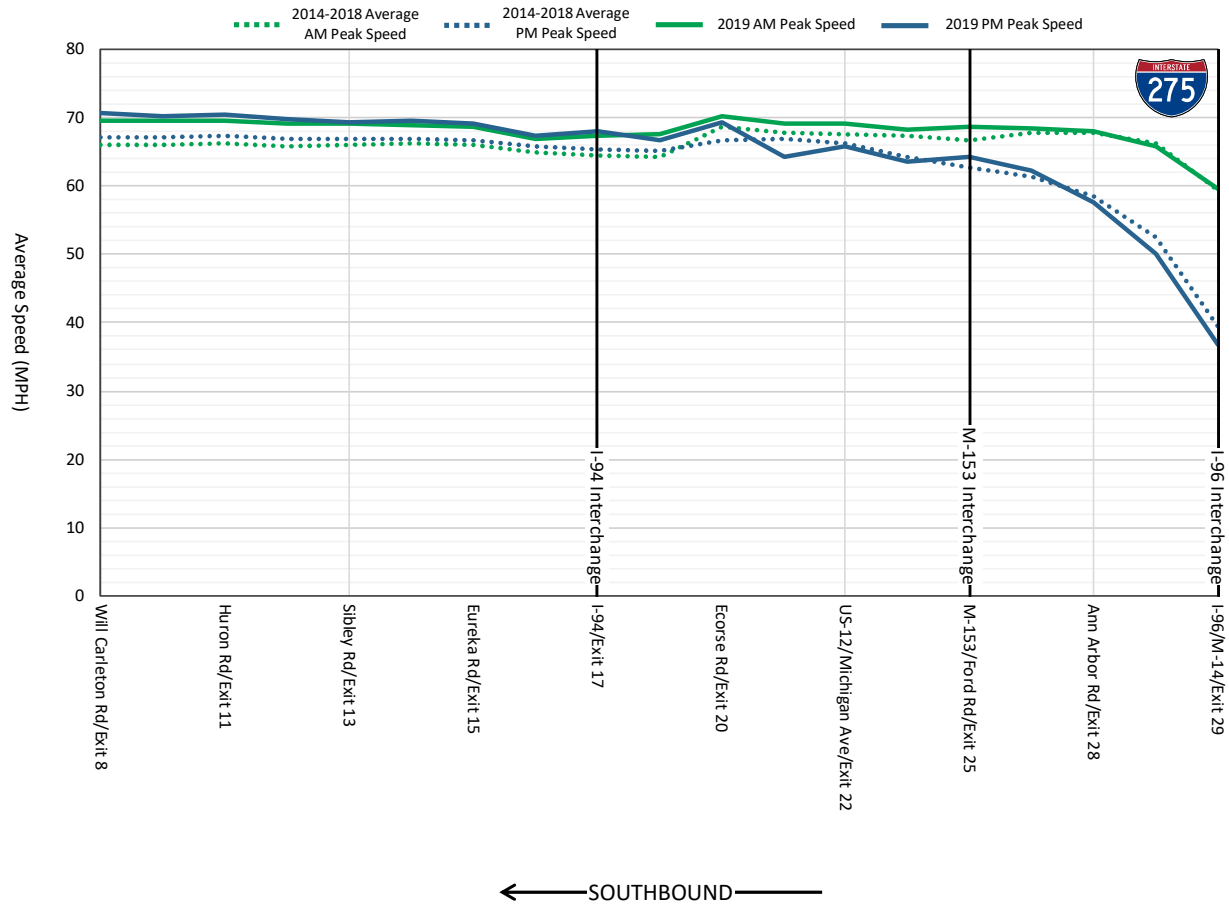


FIGURE 59. Metro Region Northbound I-275 Average Speed



## I-275: AVERAGE SPEED



**FIGURE 60. Metro Region Southbound I-275 Average Speed**



## I-275: TRAVEL TIME RELIABILITY



a) Metro Region

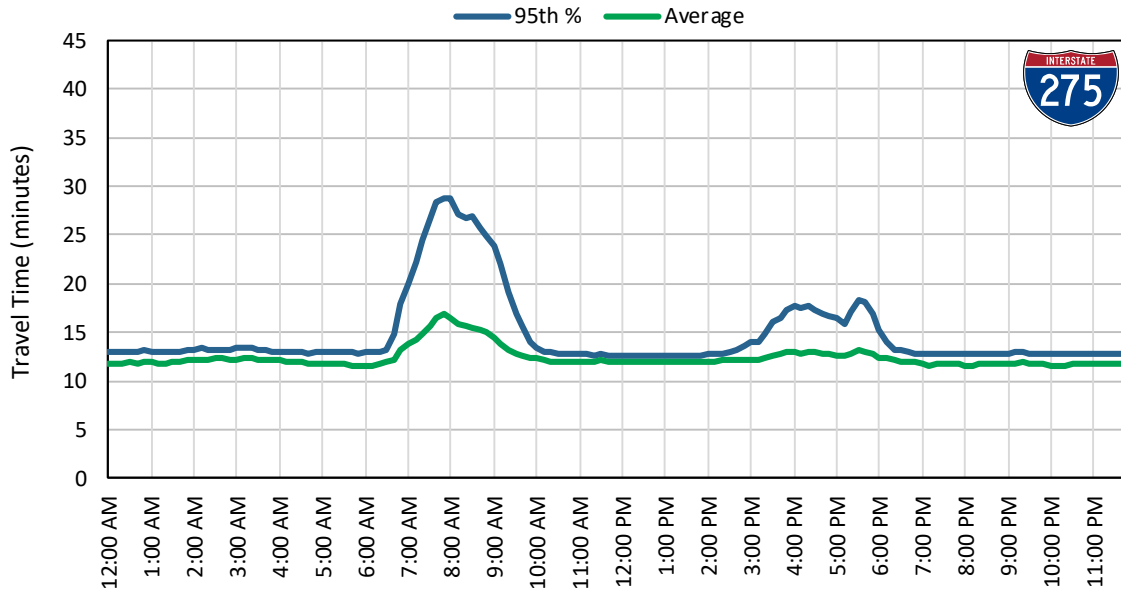


b) Detroit, Michigan

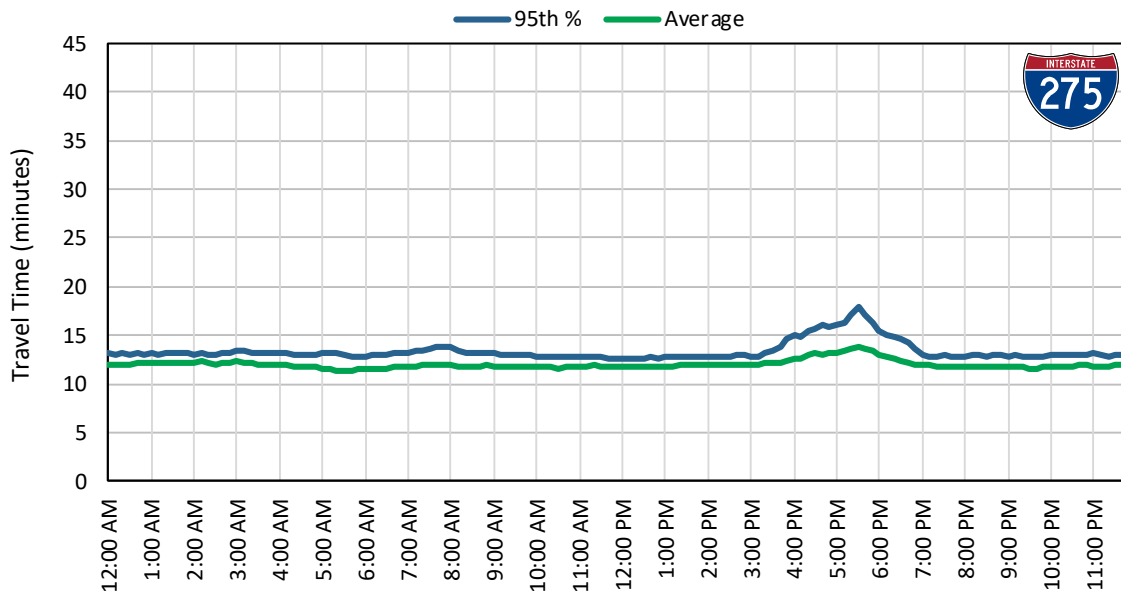
**FIGURE 61. Travel Time Reliability: I-275**



## I-275: TRAVEL TIME RELIABILITY



a) Northbound



b) Southbound

**FIGURE 62.** Segment 1 - I-275 between I-94/Exit 17 and I-96/M-14/Exit 29





## I-275: LEVEL OF TRAVEL TIME RELIABILITY

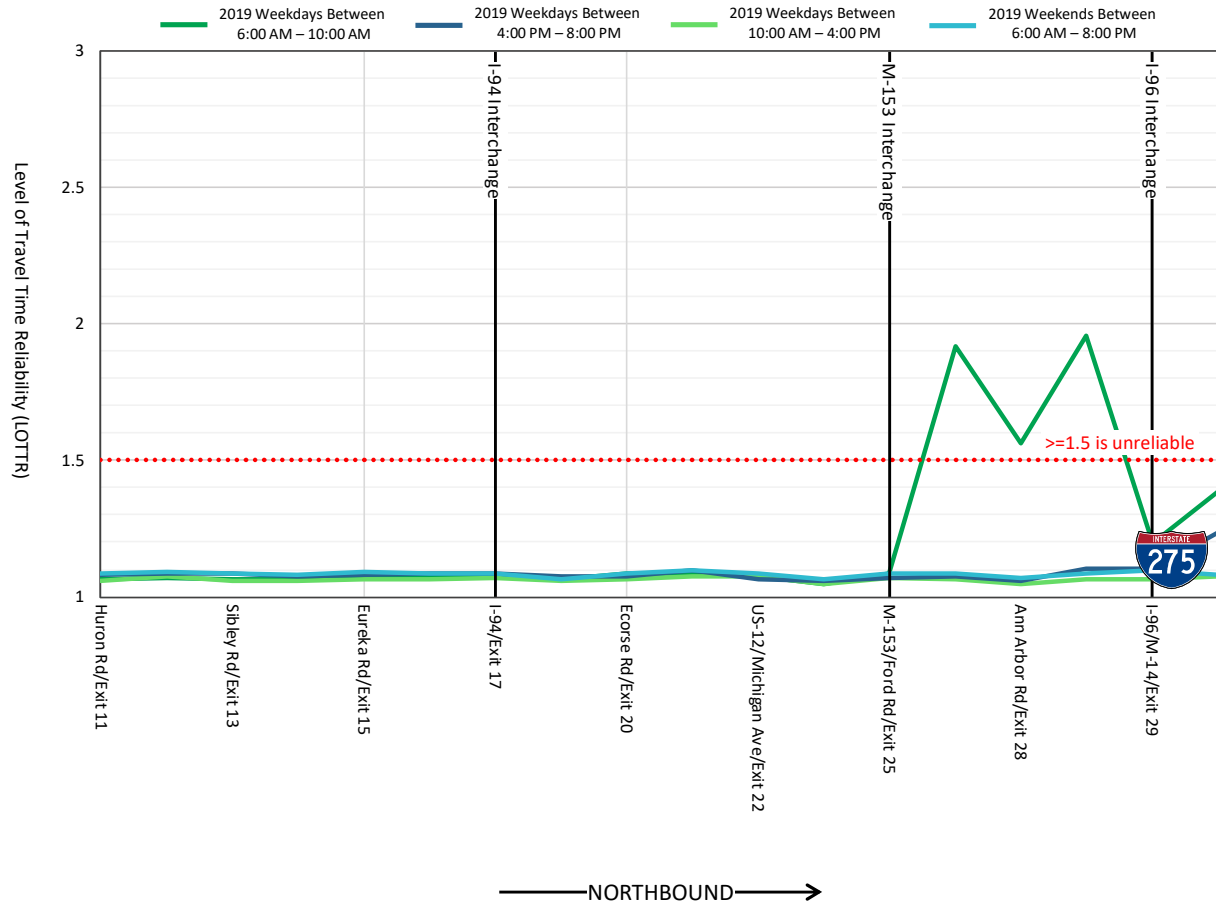
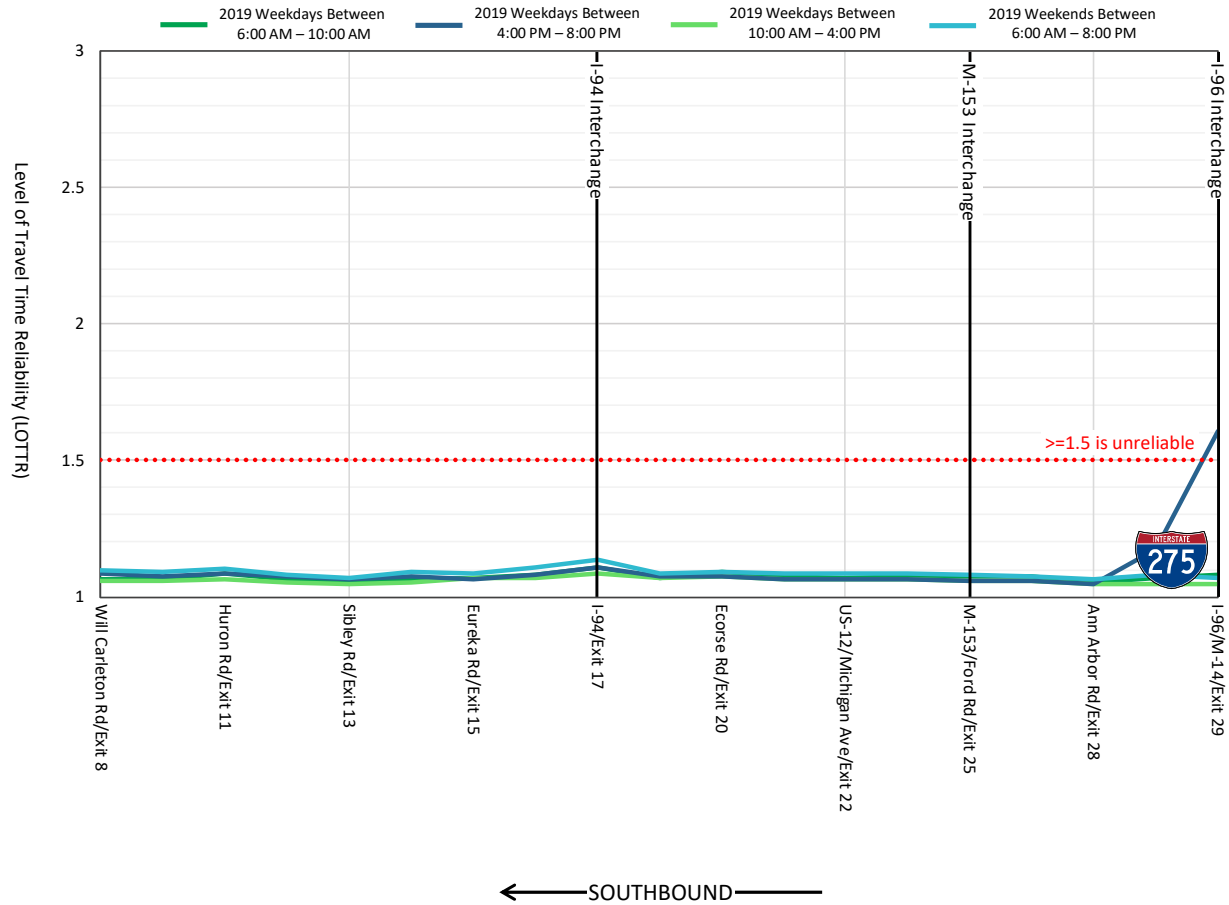


FIGURE 63. Metro Region Northbound I-275 Level of Travel Time Reliability



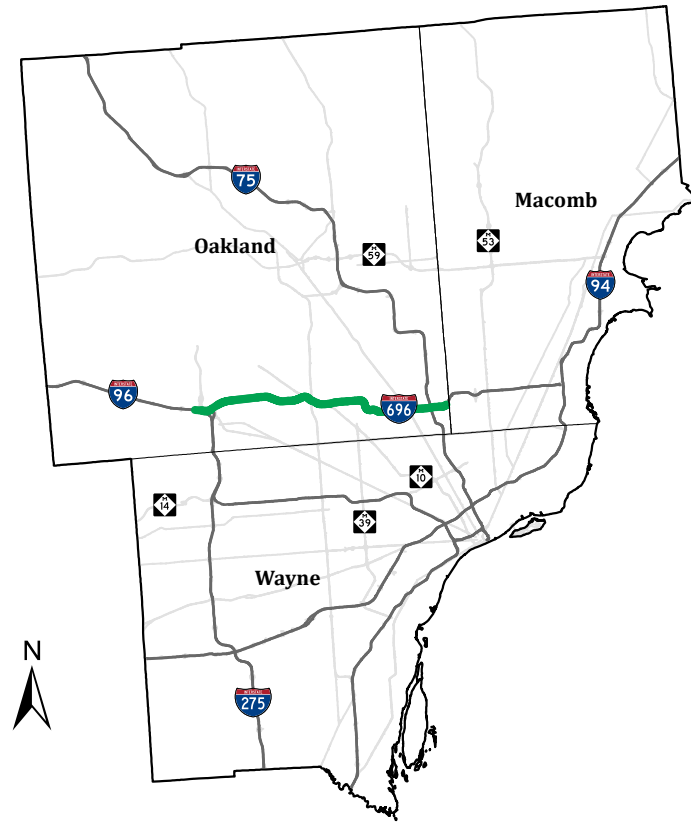
## I-275: LEVEL OF TRAVEL TIME RELIABILITY



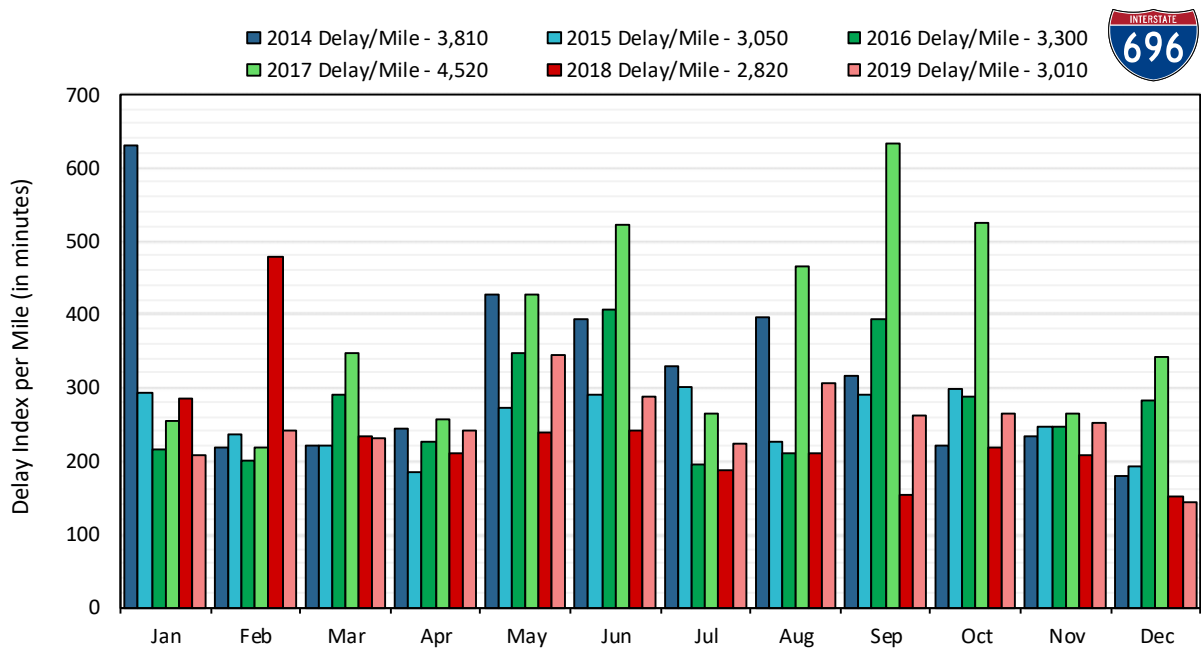
**FIGURE 64.** Metro Region Southbound I-275 Level of Travel Time Reliability



## I-696: OAKLAND COUNTY DELAY INDEX



a) Segment Map



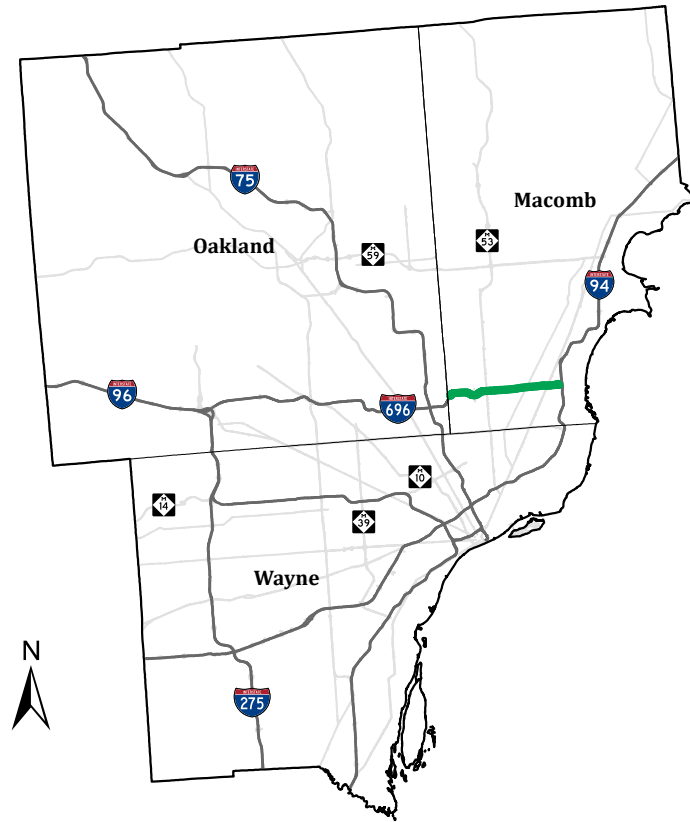
b) Delay Index Graph

**FIGURE 65. Oakland County I-696 Corridor Delay Index**

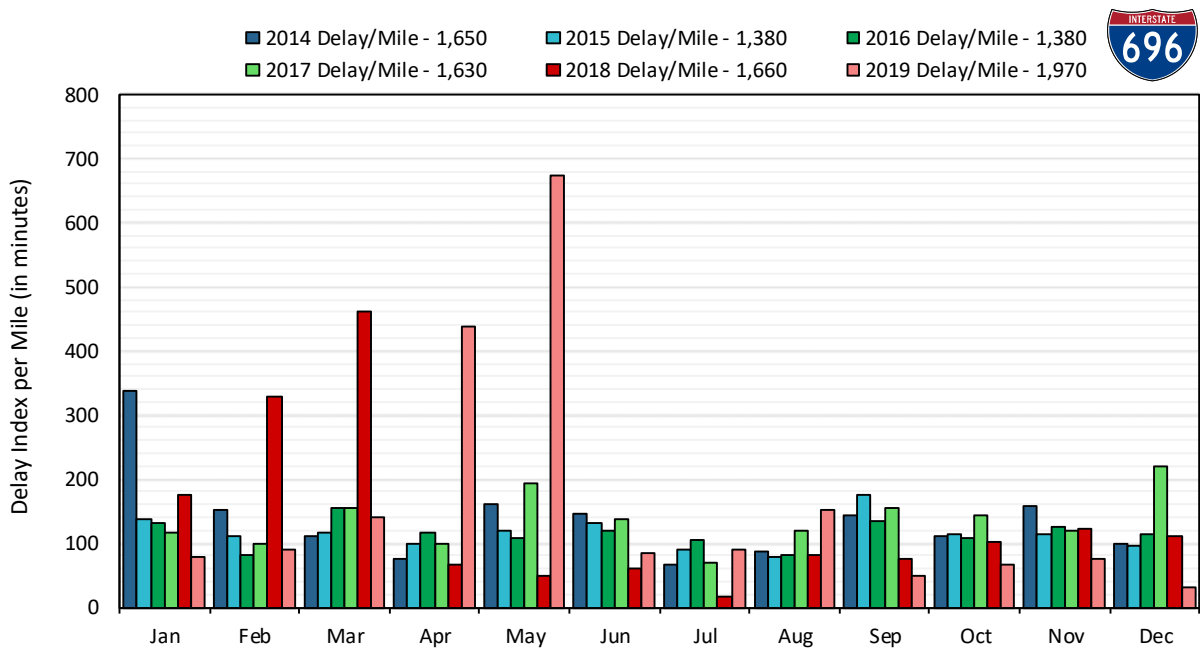




## I-696: MACOMB COUNTY DELAY INDEX



a) Segment Map

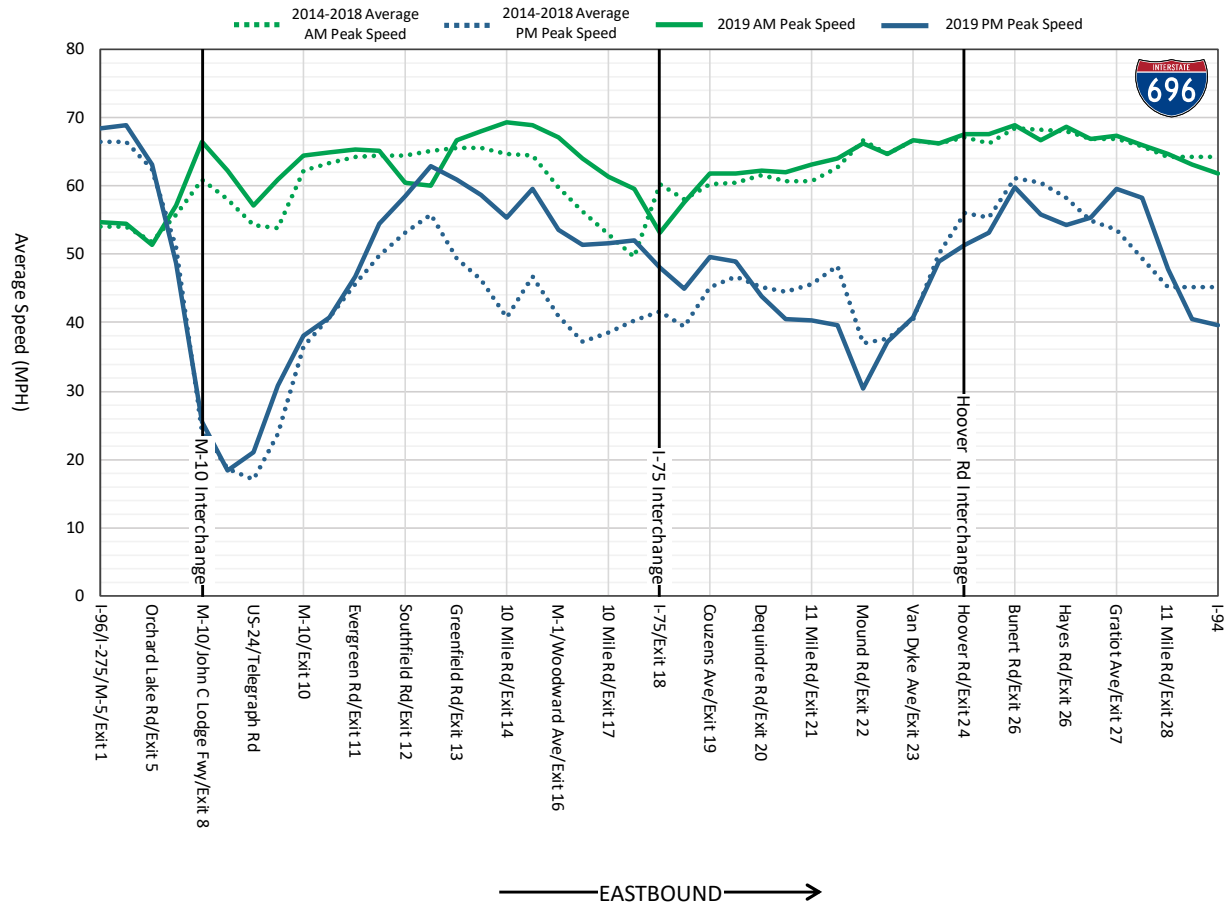


b) Delay Index Graph

**FIGURE 66. Macomb County I-696 Corridor Delay Index**



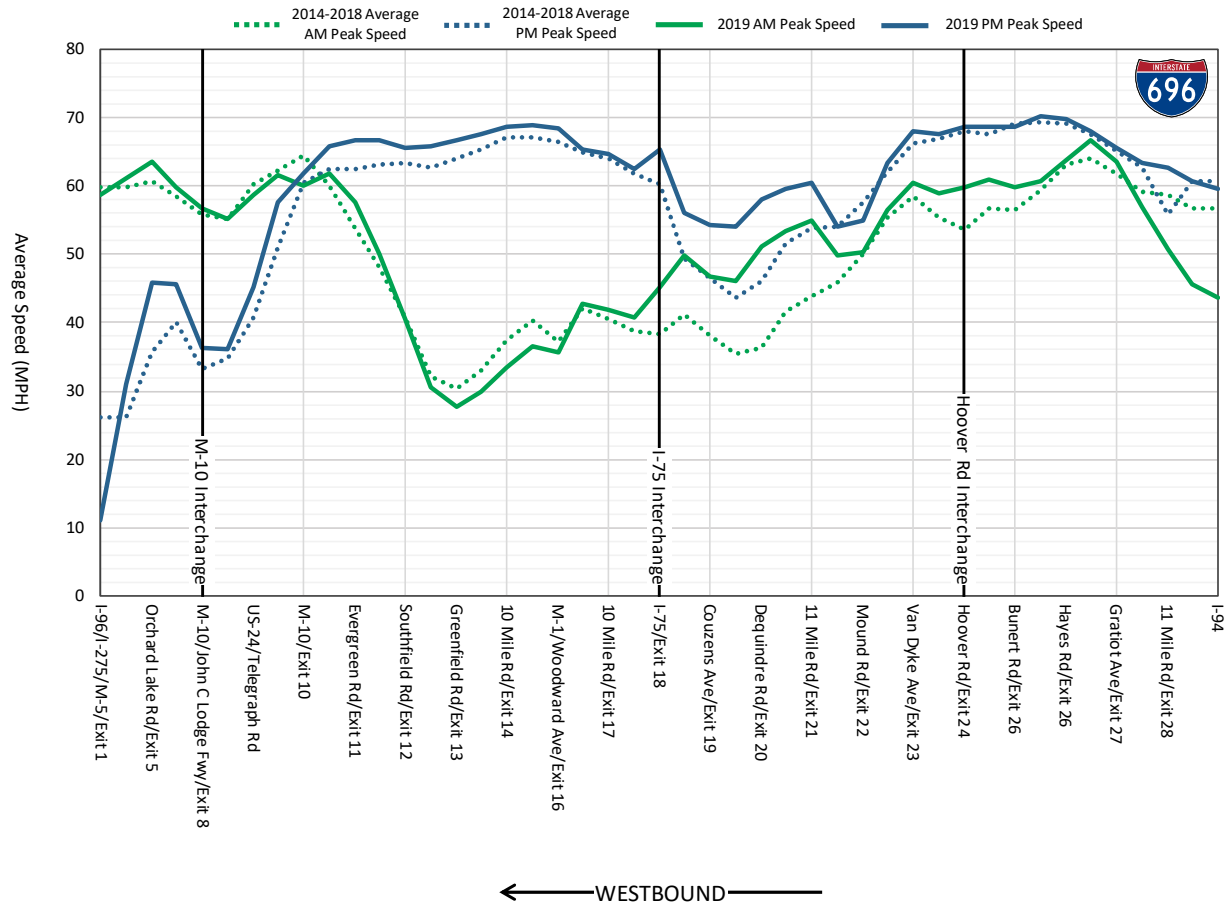
## I-696: AVERAGE SPEED



**FIGURE 67. Metro Region Eastbound I-696 Average Speed**



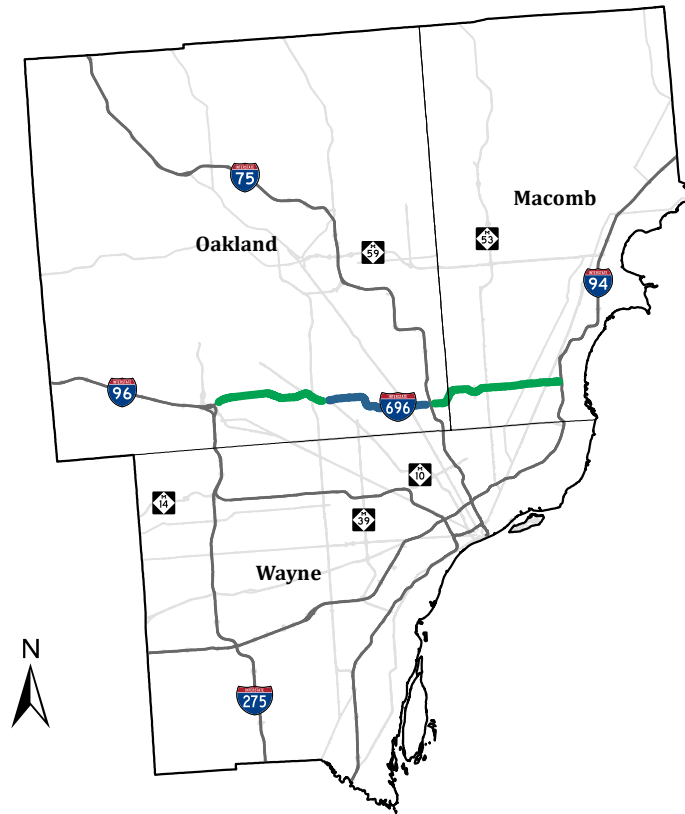
## I-696: AVERAGE SPEED



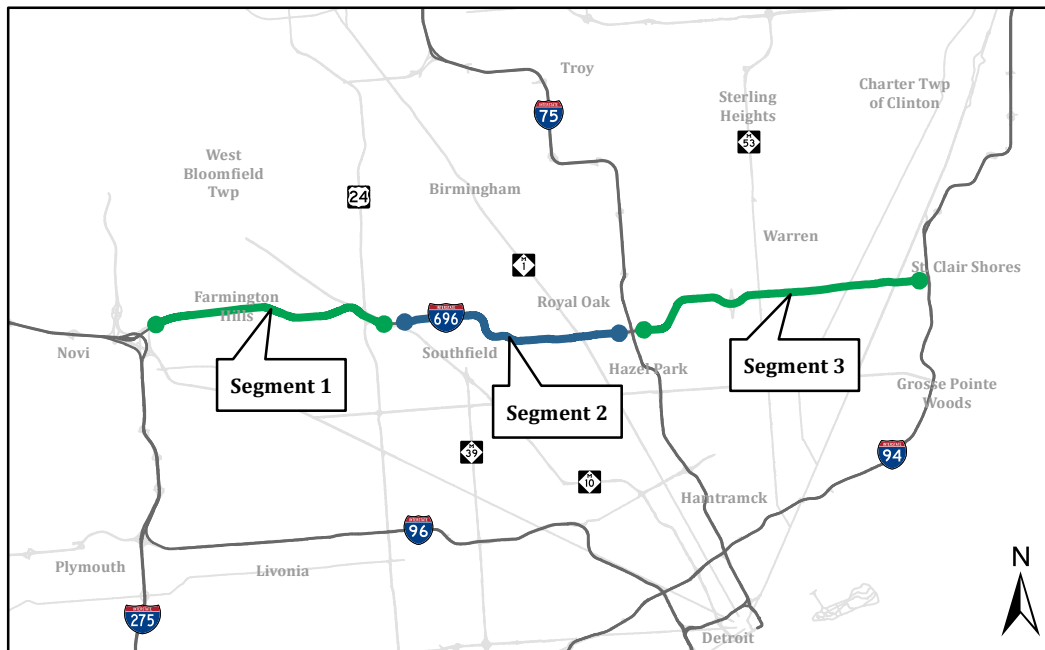
**FIGURE 68. Metro Region Westbound I-696 Average Speed**



## I-696: TRAVEL TIME RELIABILITY



a) Metro Region

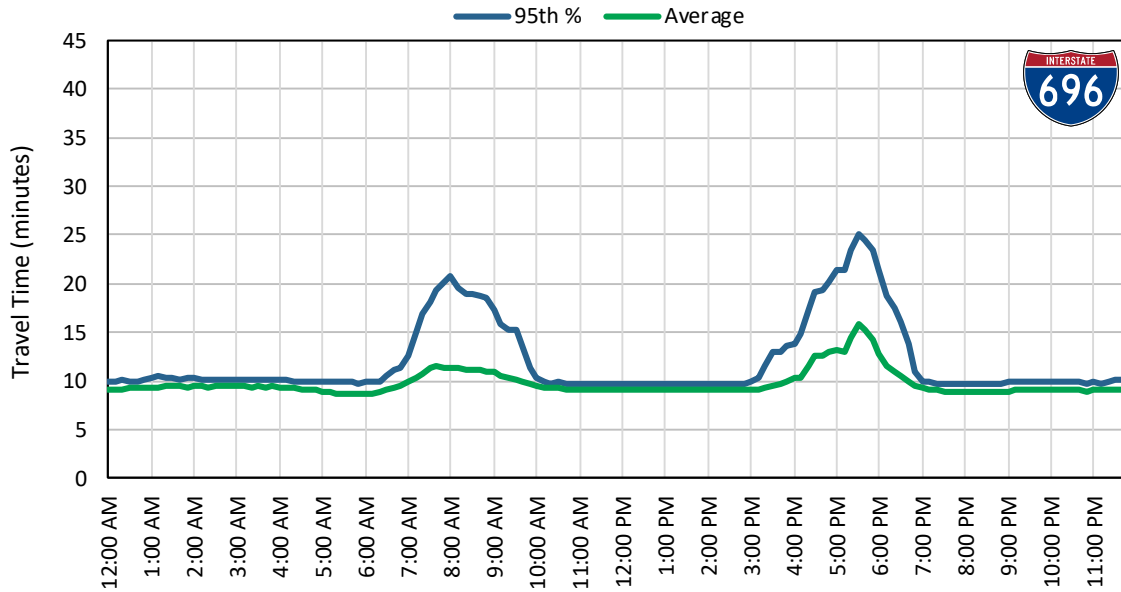


b) Detroit, Michigan

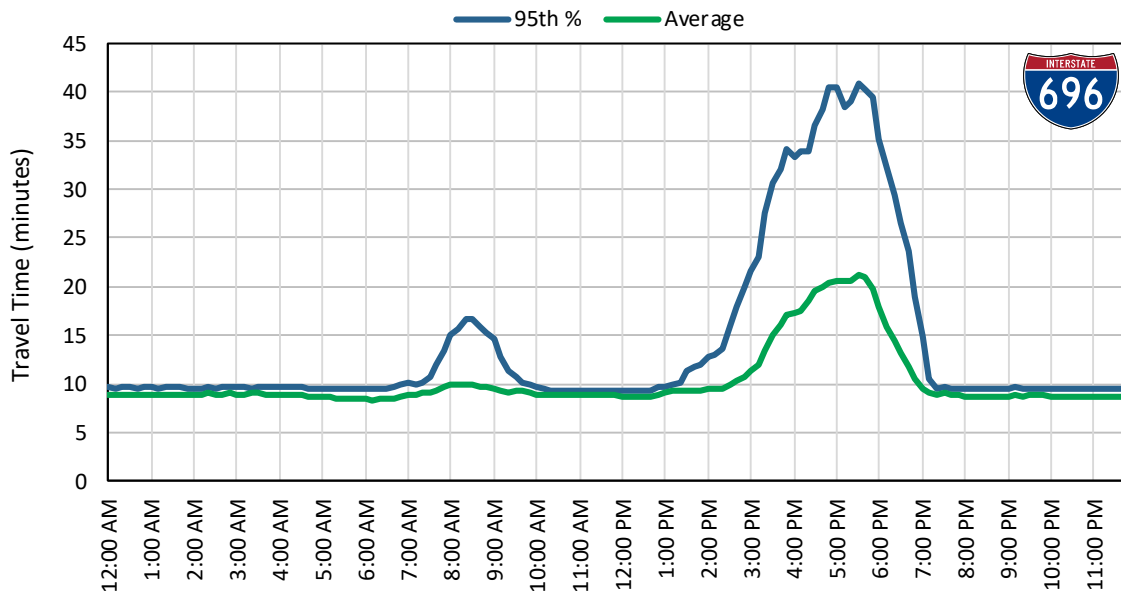
**FIGURE 69. Travel time Reliability: I-696**



## I-696: TRAVEL TIME RELIABILITY



a) Eastbound



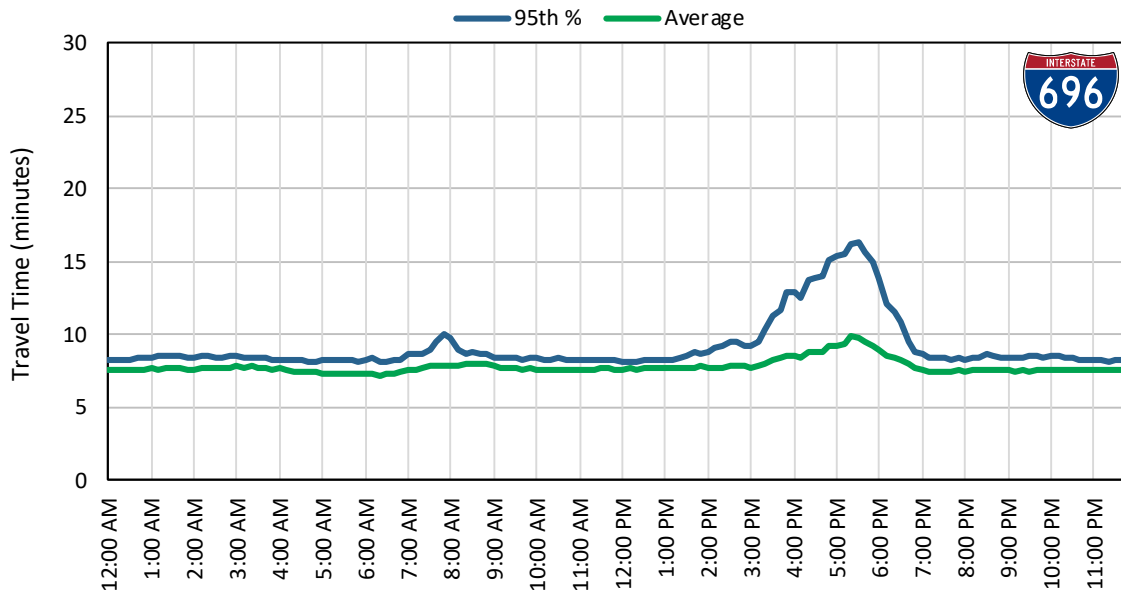
b) Westbound

**FIGURE 70.** Segment 1 - I-696 between I-96/I-275/M-5/Exit 1 and M-10/Exit 10

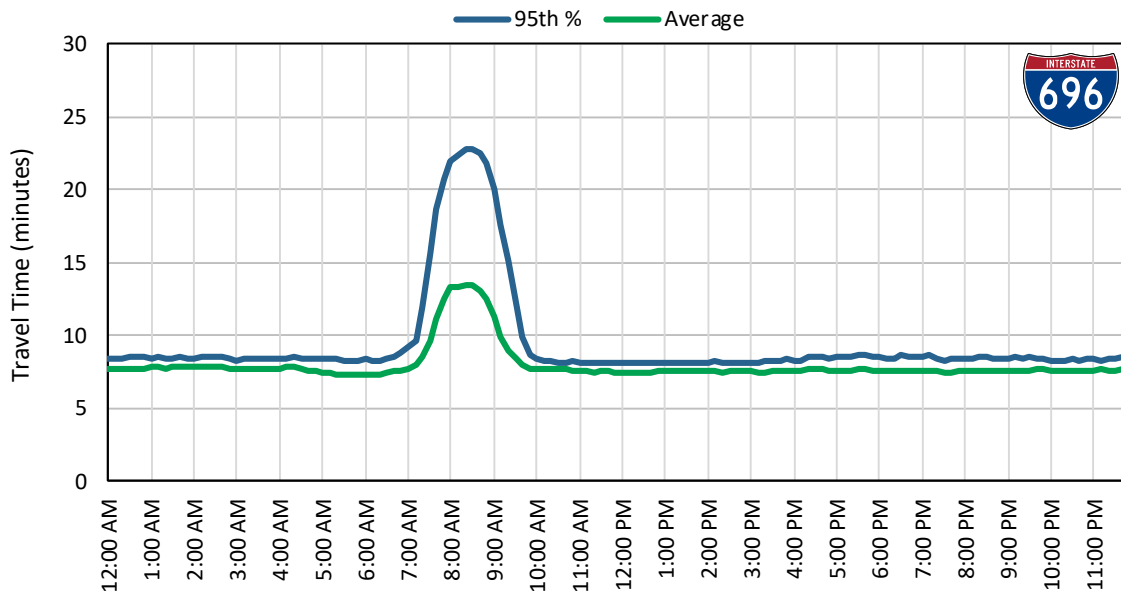




## I-696: TRAVEL TIME RELIABILITY



a) Eastbound

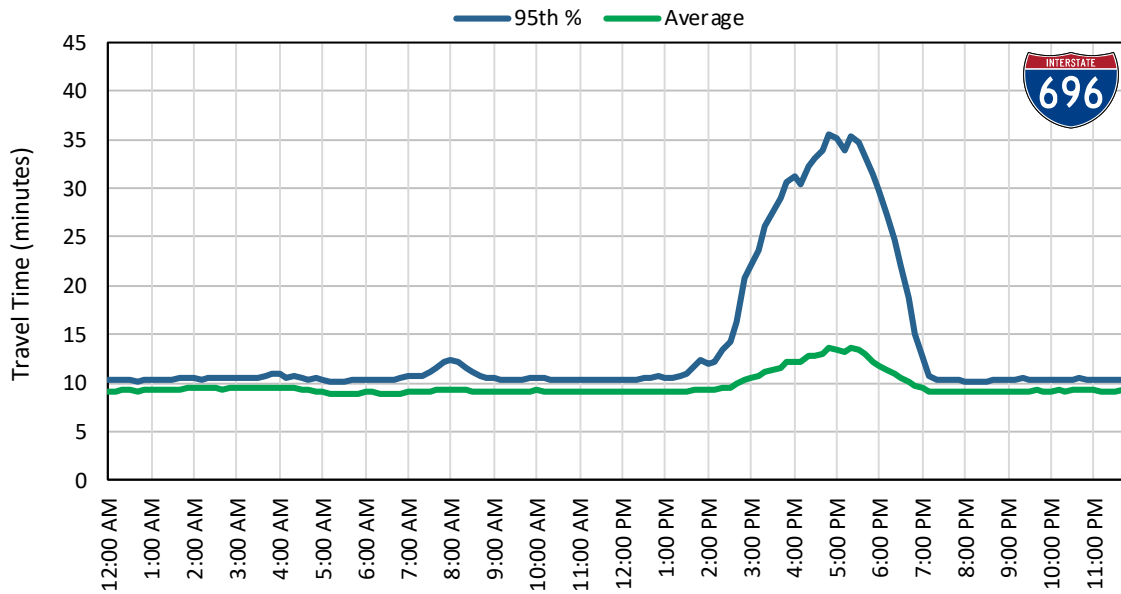


b) Westbound

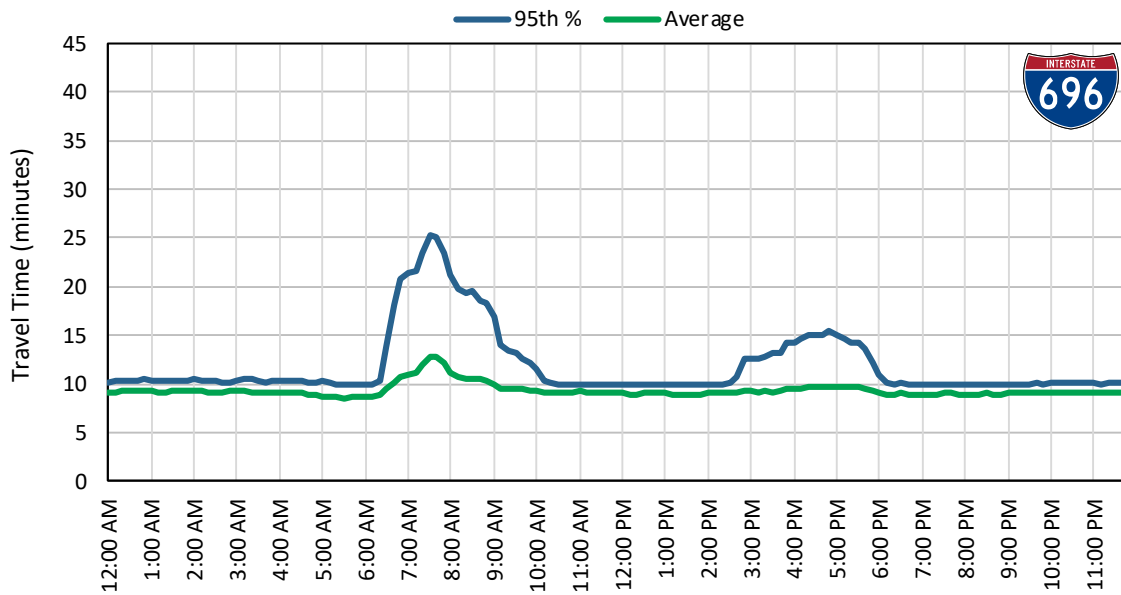
**FIGURE713.** Segment 2 - I-696 between M-10/Exit 10 and I-75/Exit 18



## I-696: TRAVEL TIME RELIABILITY



a) Eastbound



b) Westbound

**FIGURE 72. Segment 3 - I-696 between I-75/Exit 18 and I-94**



## I-696: LEVEL OF TRAVEL TIME RELIABILITY

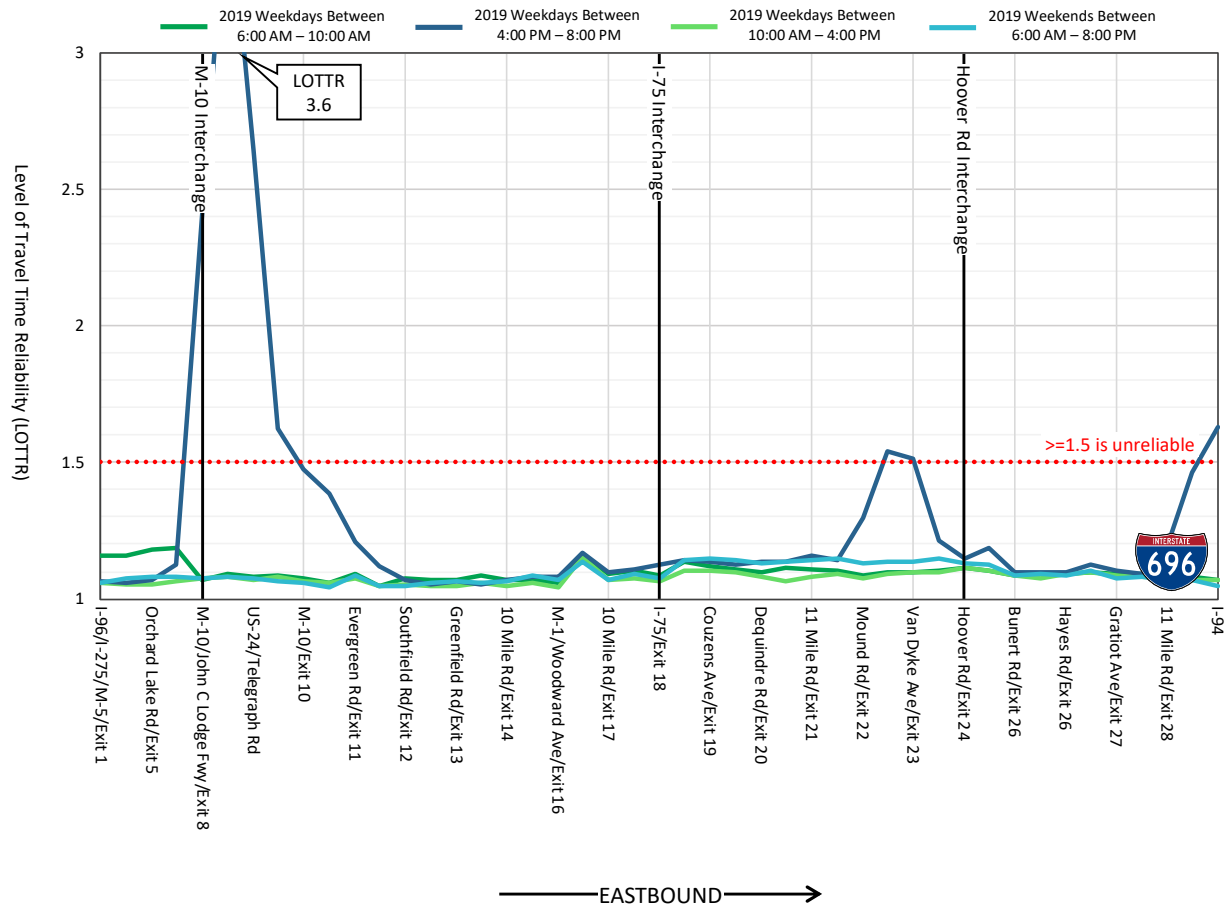


FIGURE 73. Metro Region Eastbound I-696 Level of Travel Time Reliability



## I-696: LEVEL OF TRAVEL TIME RELIABILITY

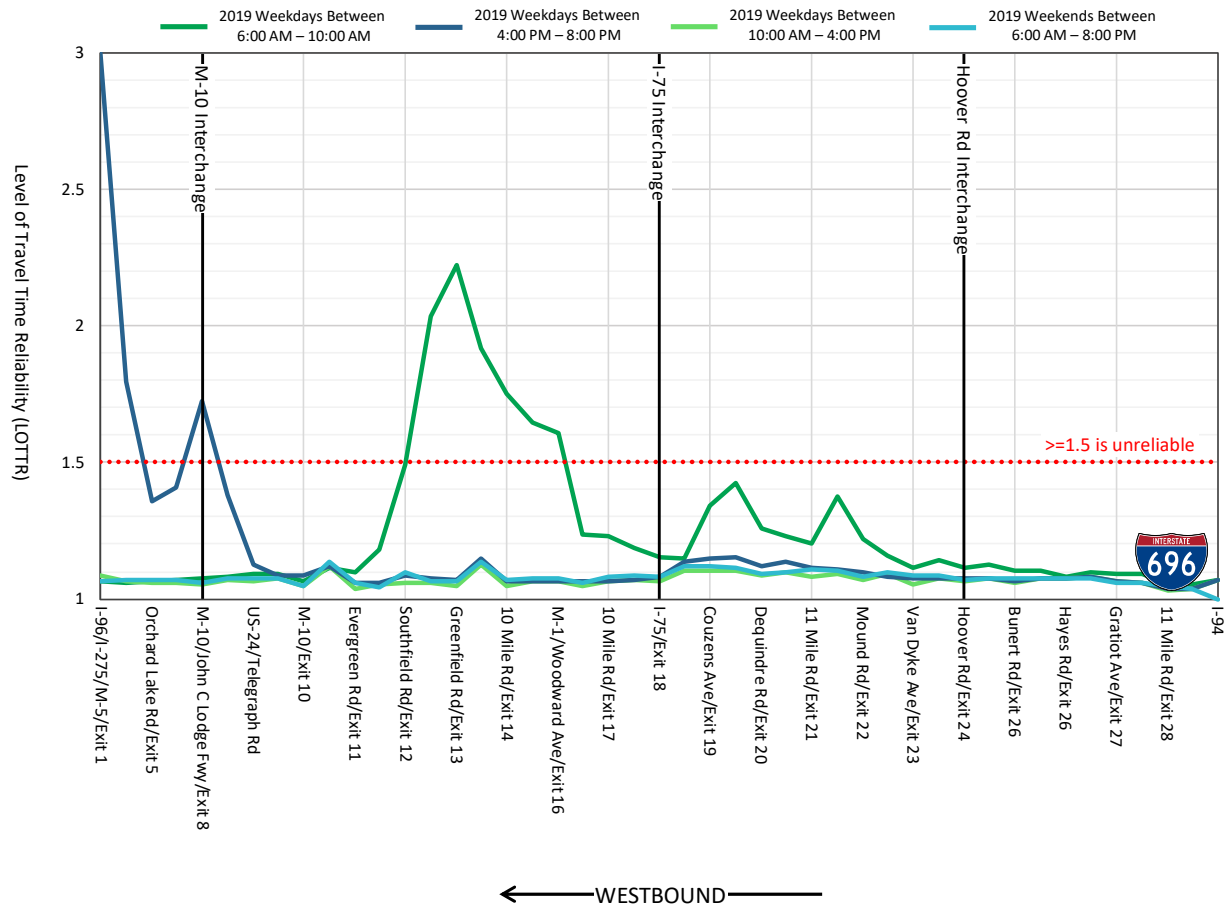
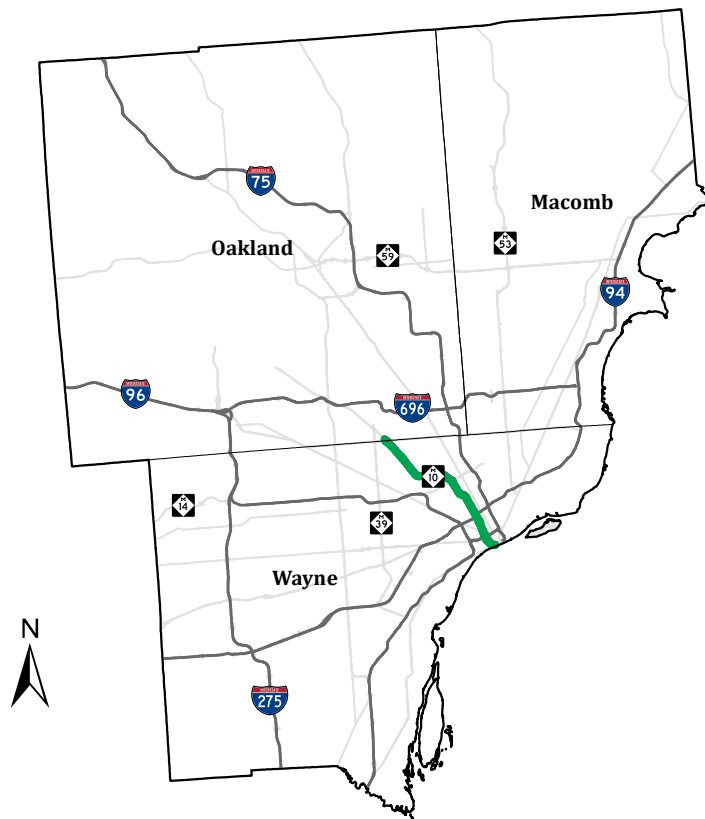


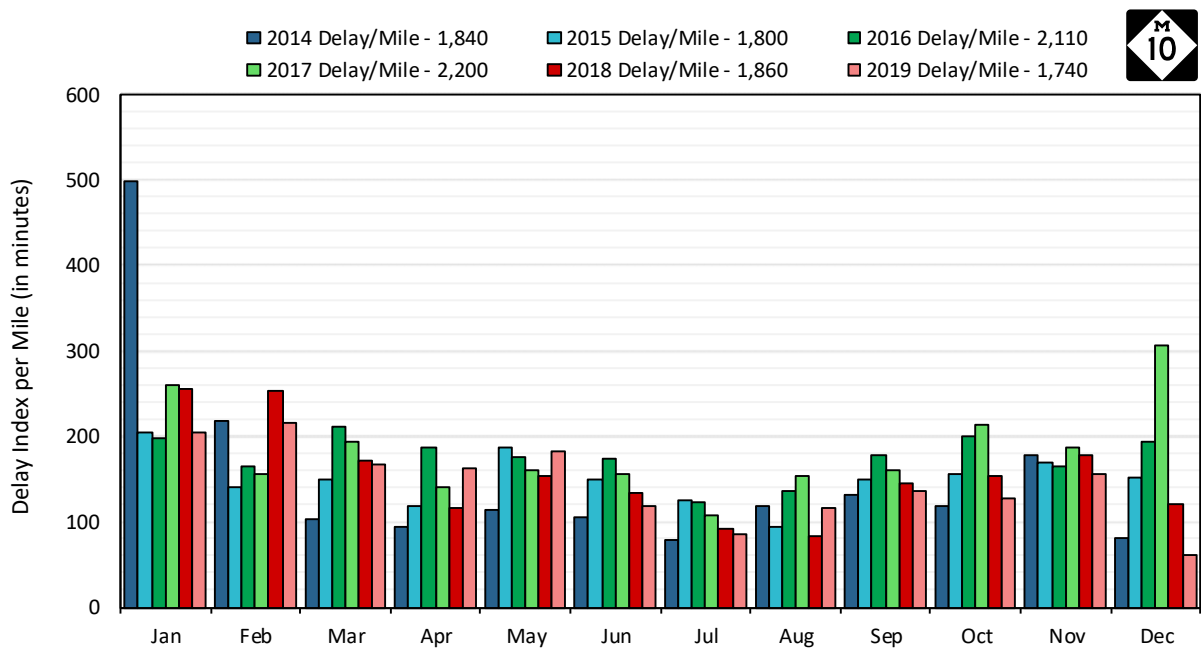
FIGURE 74. Metro Region Westbound I-696 Level of Travel Time Reliability



## M-10: DETROIT TSC DELAY INDEX (55 MPH)



a) Segment Map

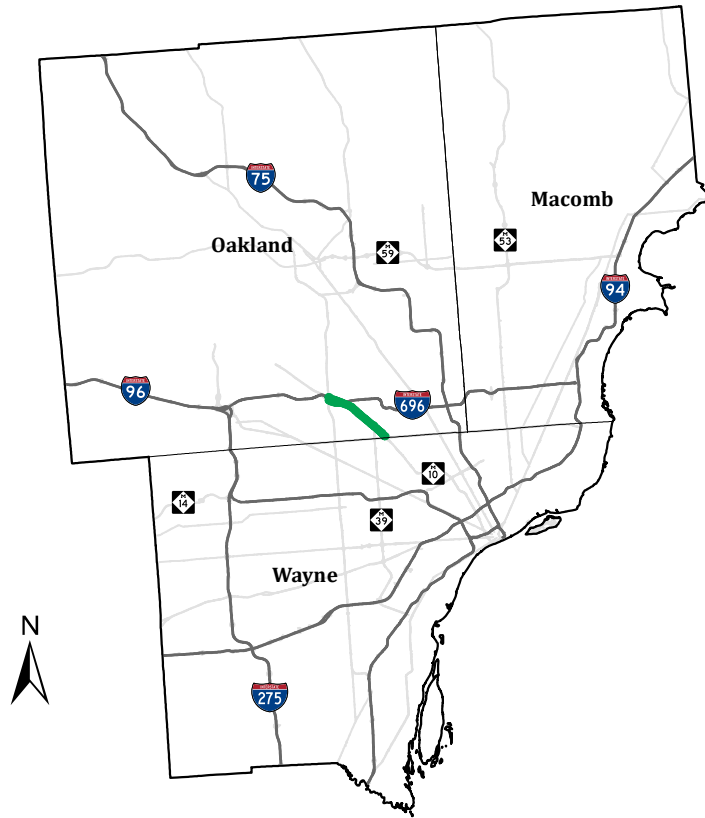


b) Delay Index Graph

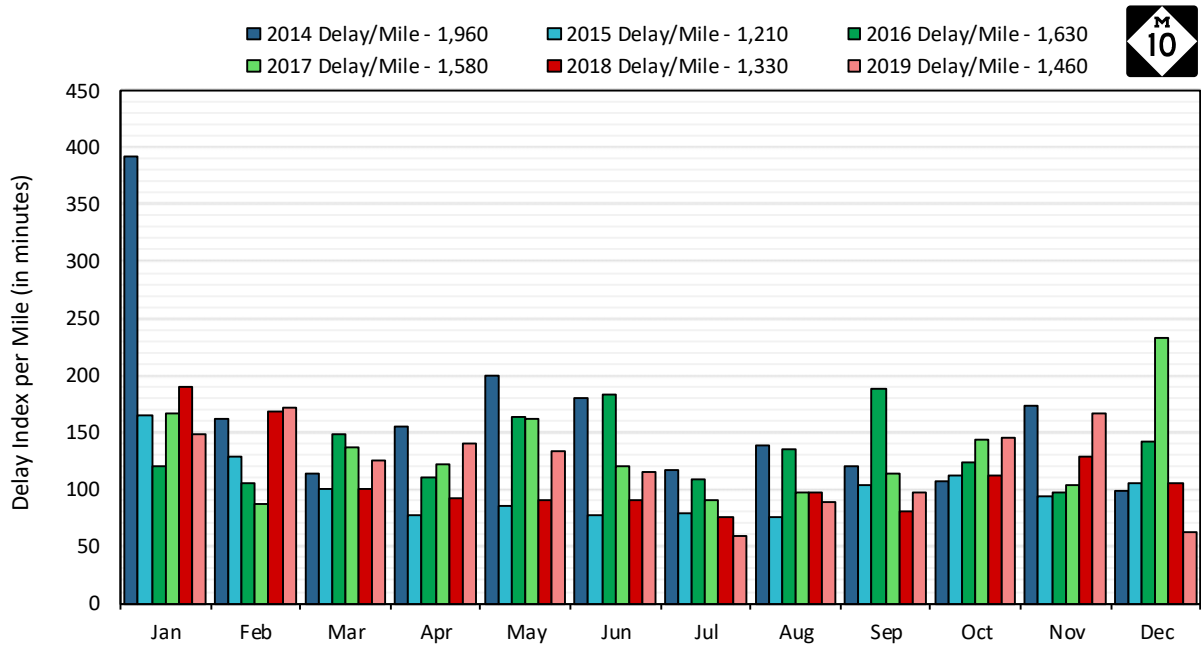
**FIGURE 75. Detroit TSC M-10 (55 MPH) Corridor Delay Index**



## M-10: OAKLAND COUNTY DELAY INDEX



a) Segment Map

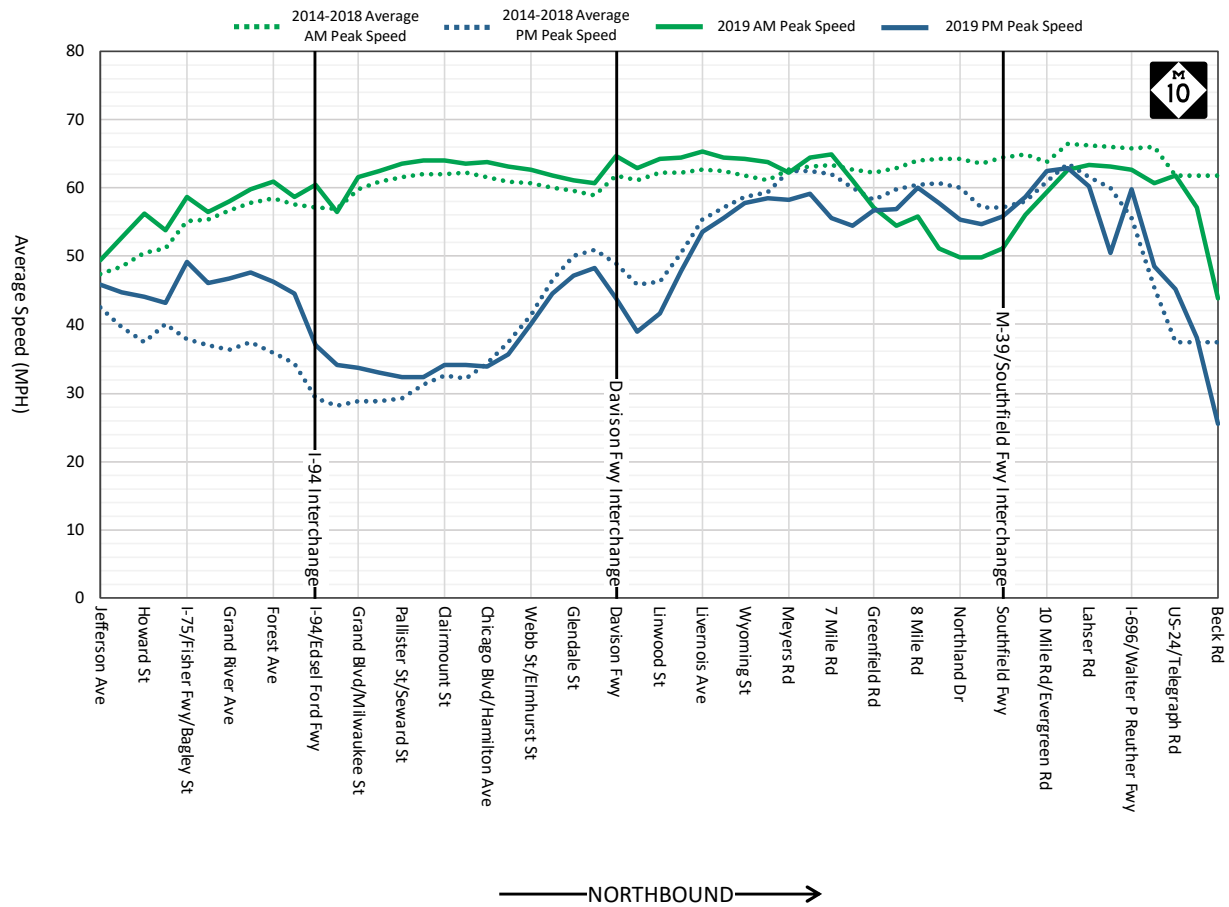


b) Delay Index Graph

FIGURE 76. Oakland County M-10 Corridor Delay Index



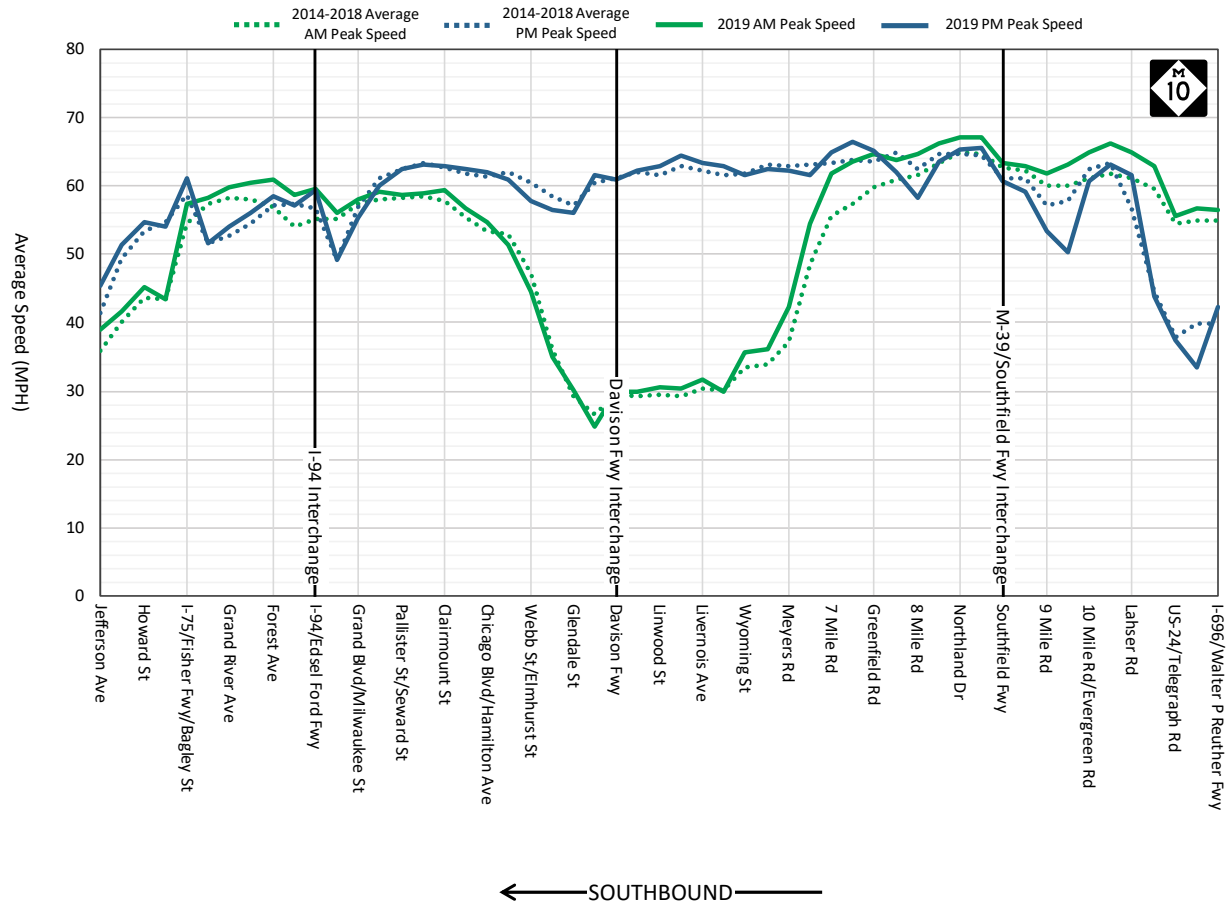
## M-10: AVERAGE SPEED



**FIGURE 77. Metro Region Northbound M-10 Average Speed**



## M-10: AVERAGE SPEED

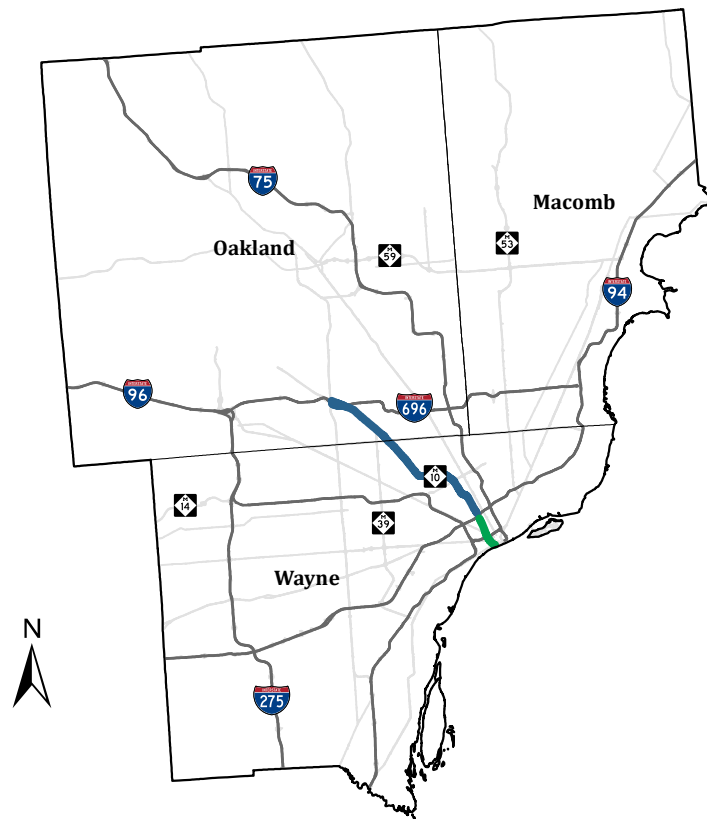


**FIGURE 78. Metro Region Southbound M-10 Average Speed**

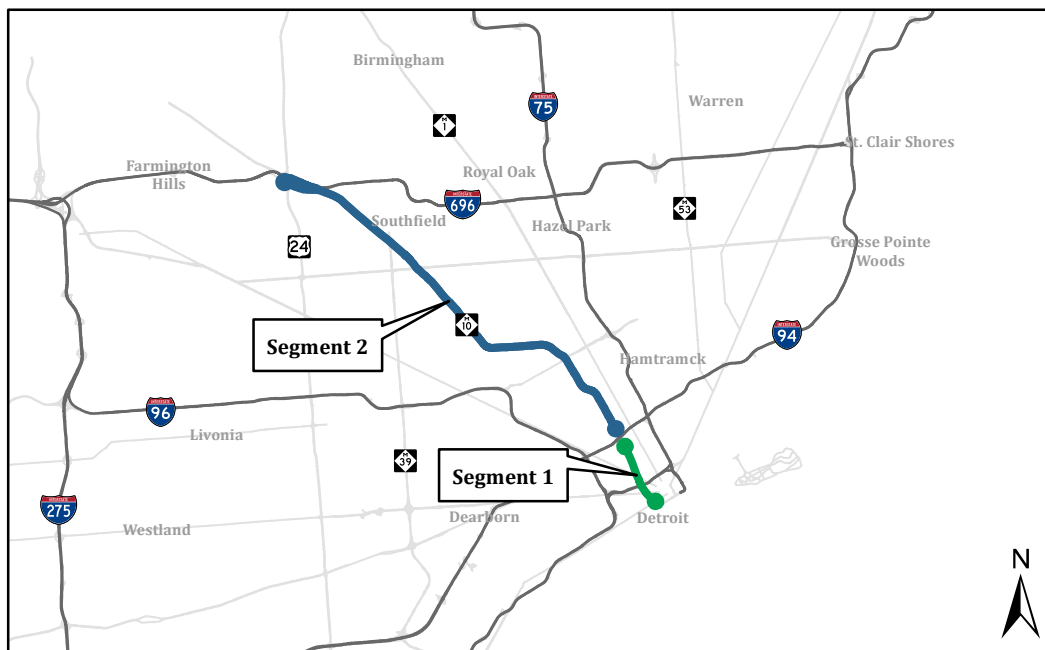




## M-10: TRAVEL TIME RELIABILITY



a) Metro Region

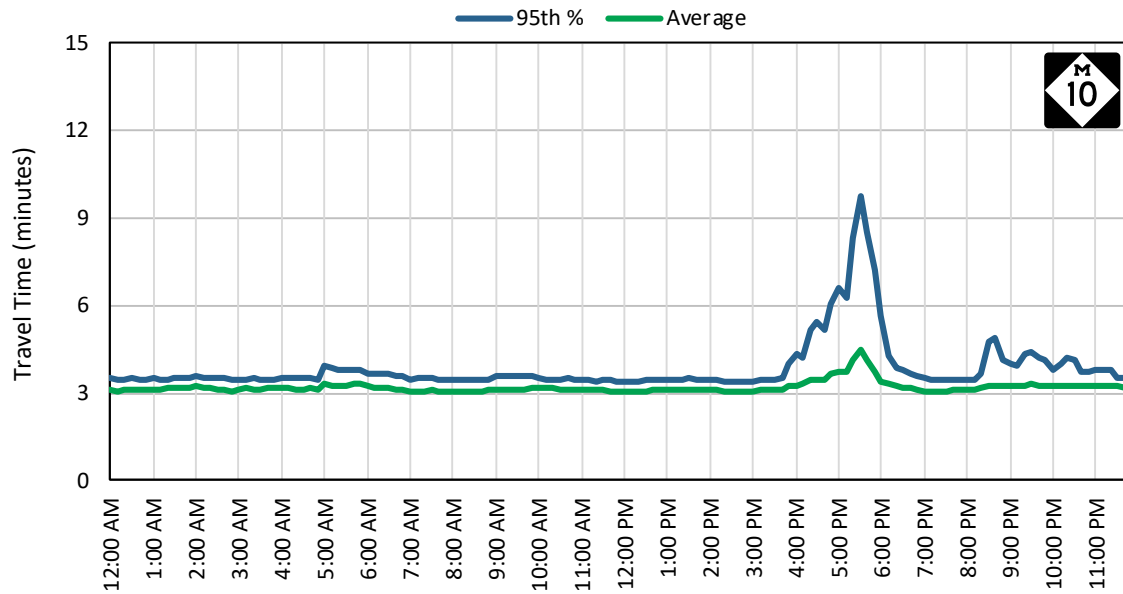


b) Detroit, Michigan

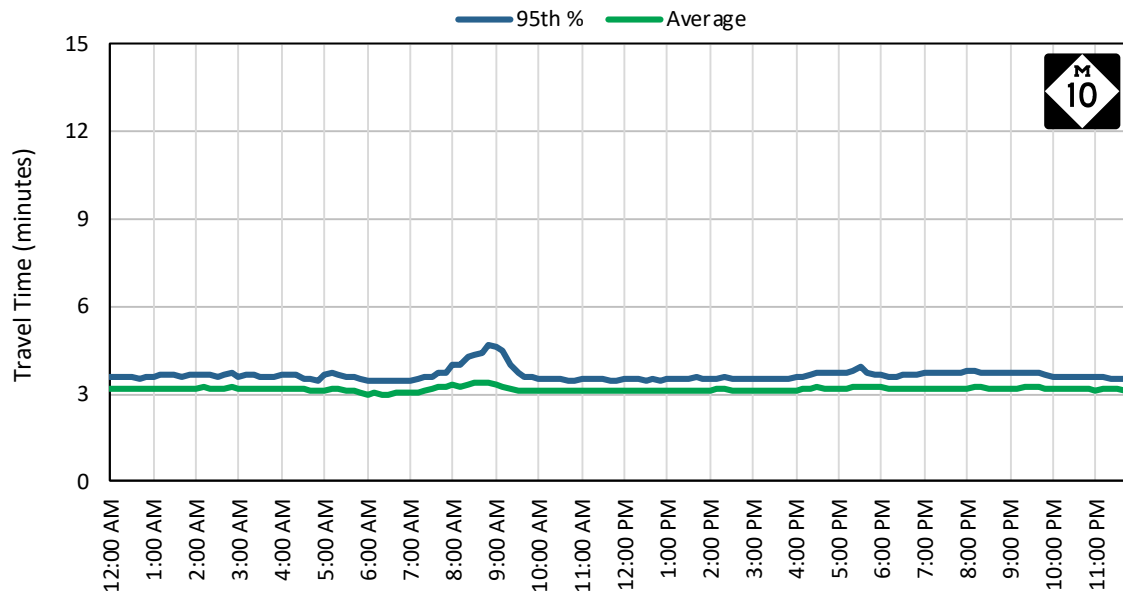
**FIGURE 79. Travel time Reliability: M-10**



## M-10: TRAVEL TIME RELIABILITY



a) Northbound

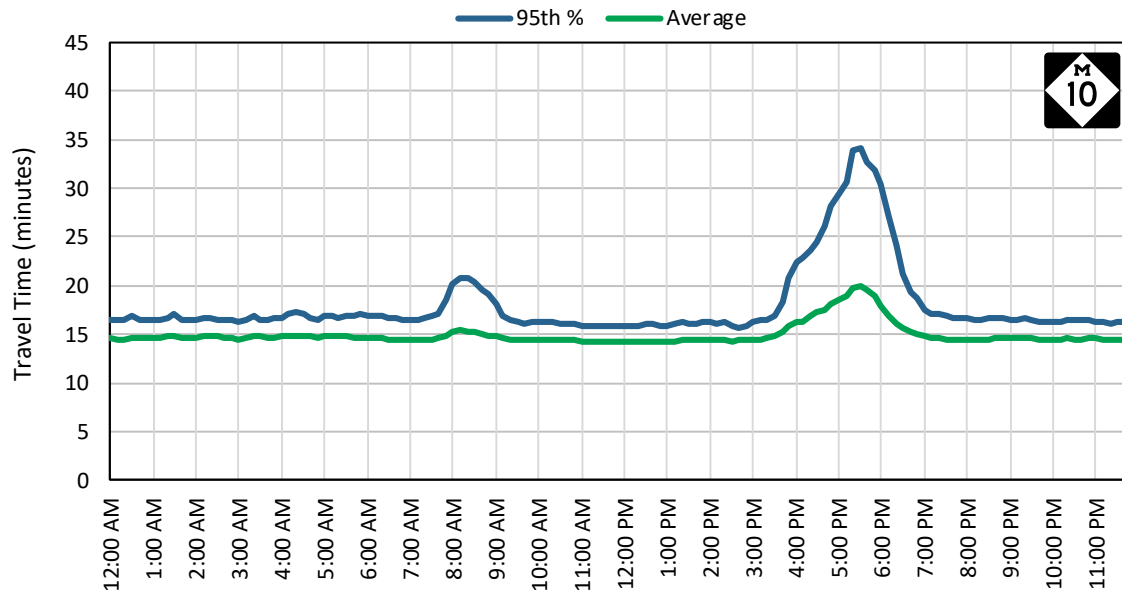


b) Southbound

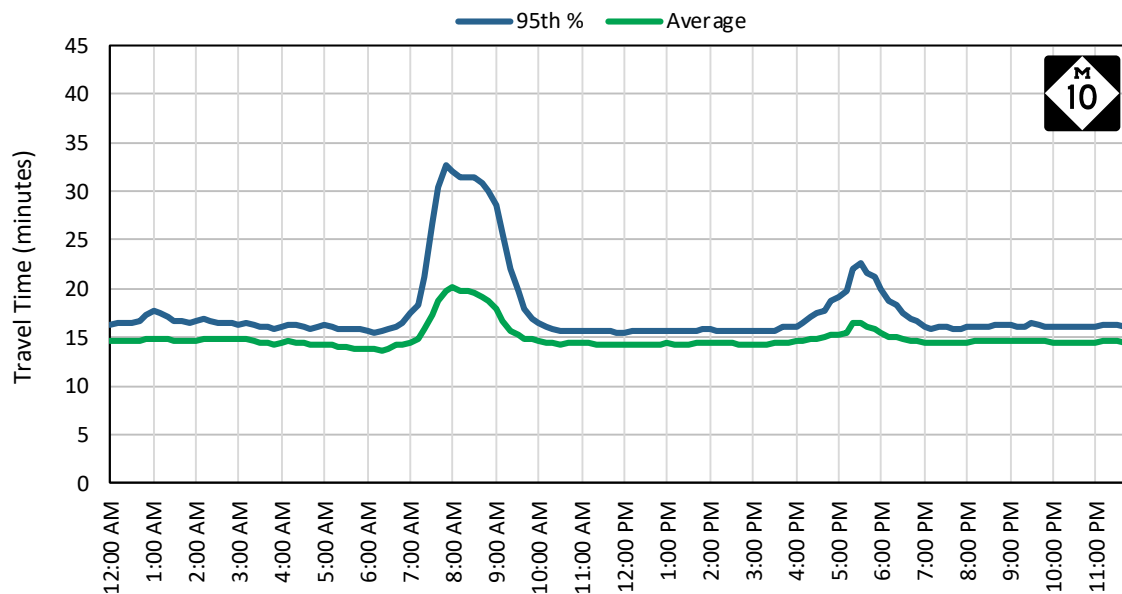
**FIGURE 80.** Segment 1 - M-10 between US-24/Telegraph Rd and I-94/Edsel Ford Fwy



## M-10: TRAVEL TIME RELIABILITY



a) Northbound



b) Southbound

**FIGURE 81.** Segment 2 - M-10 between I-94/Edsel Ford Fwy and M-1/Woodward Ave



## M-10: LEVEL OF TRAVEL TIME RELIABILITY

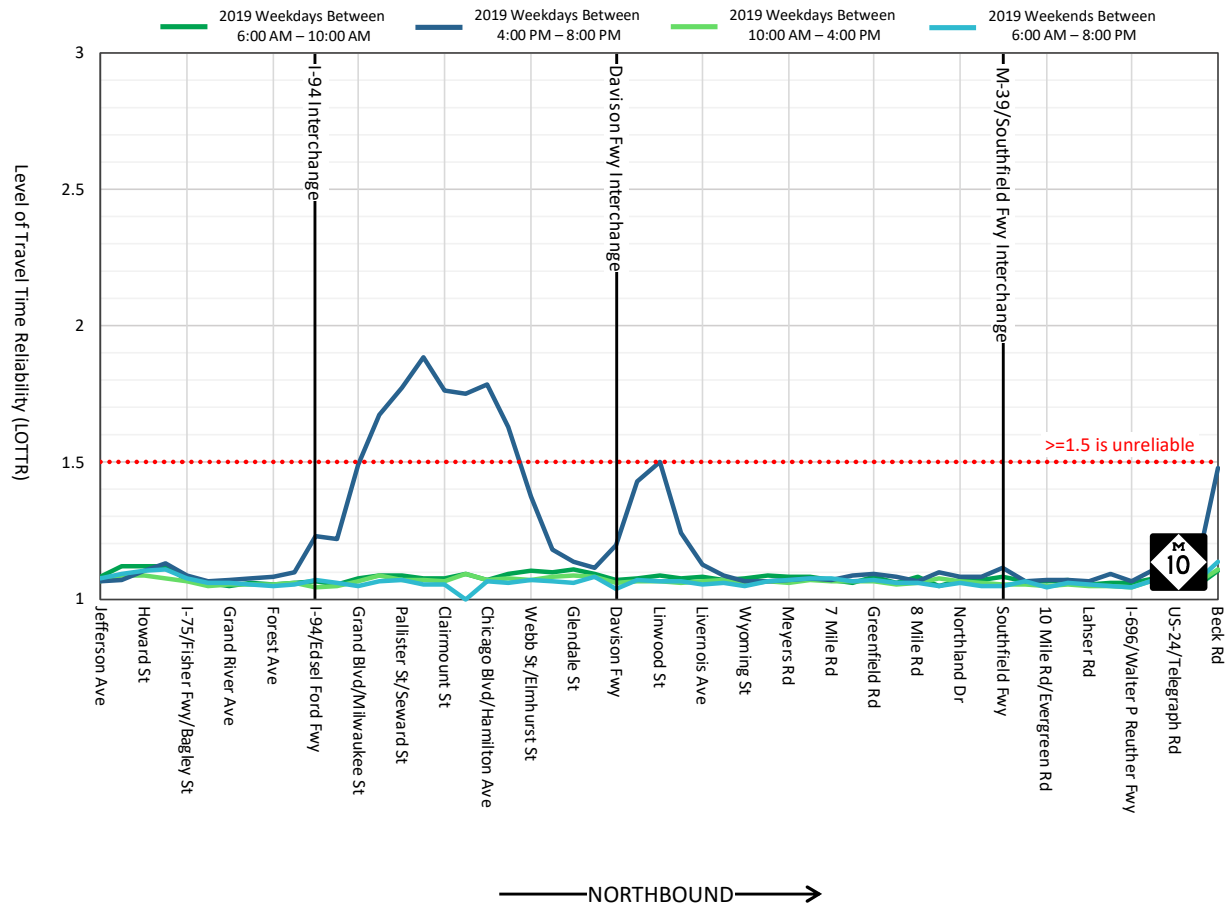
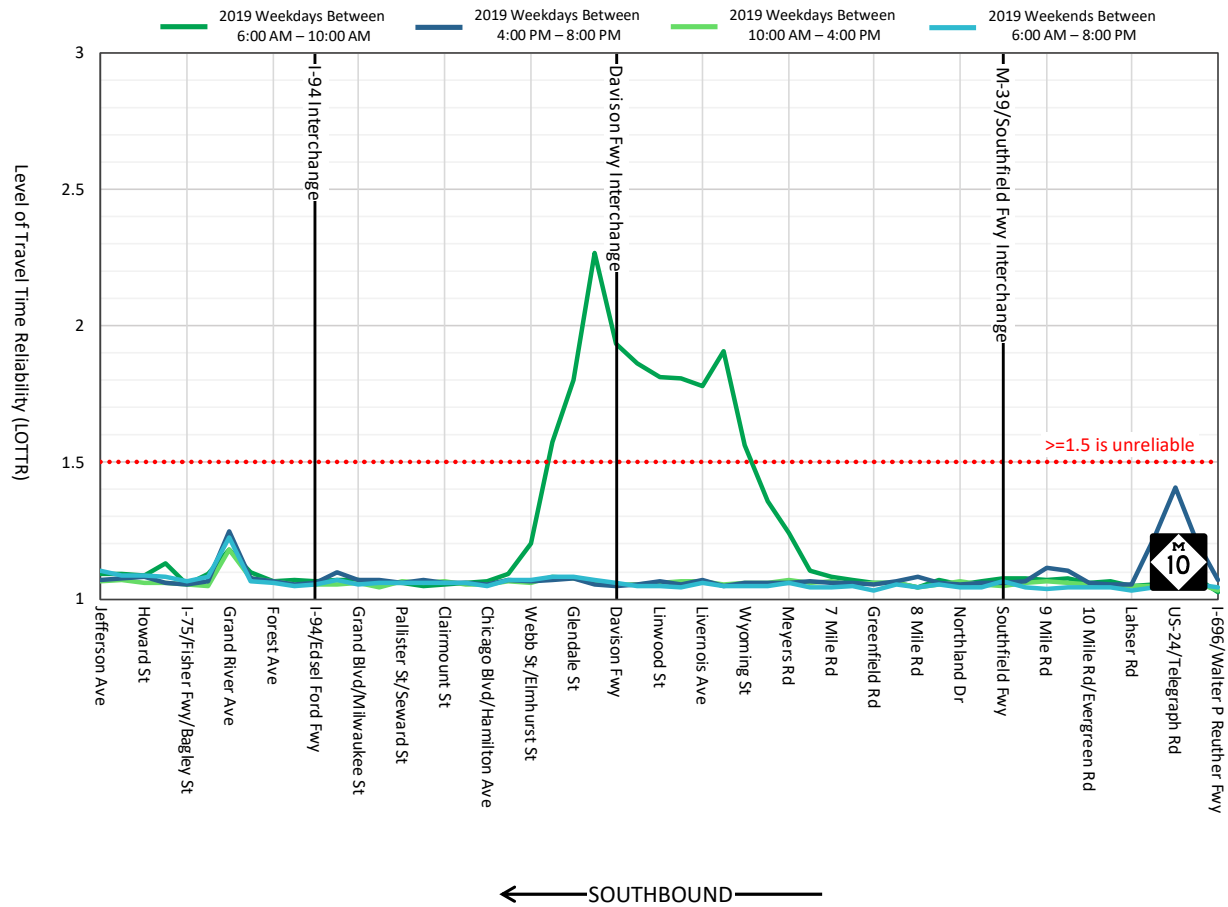


FIGURE 82. Metro Region Northbound M-10 Level of Travel Time Reliability



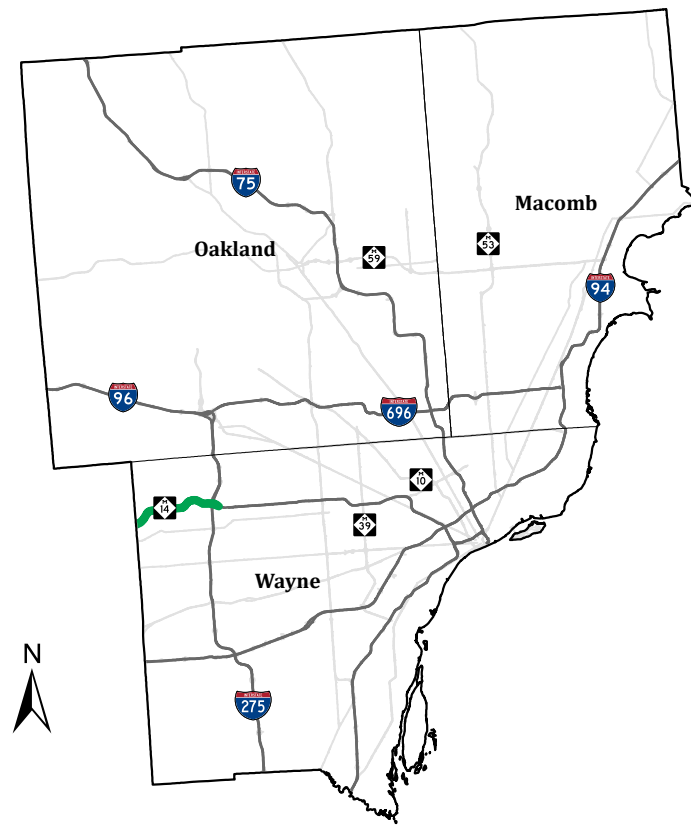
## M-10: LEVEL OF TRAVEL TIME RELIABILITY



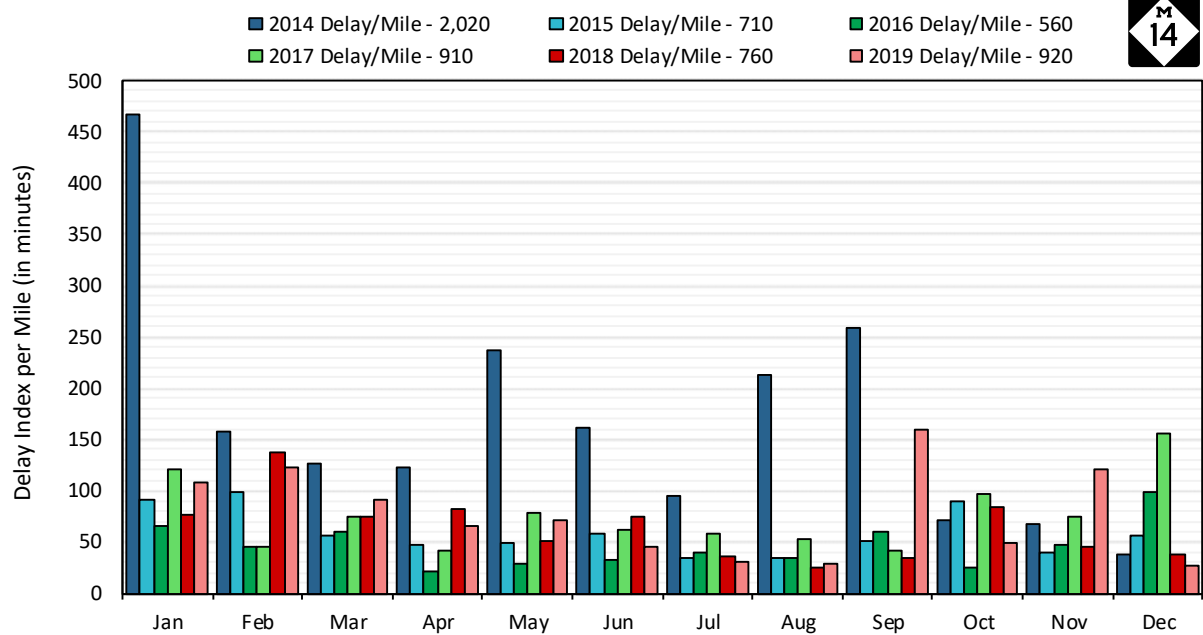
**FIGURE 83. Metro Region Southbound M-10 Level of Travel Time Reliability**



## M-14: TAYLOR TSC DELAY INDEX



a) Segment Map



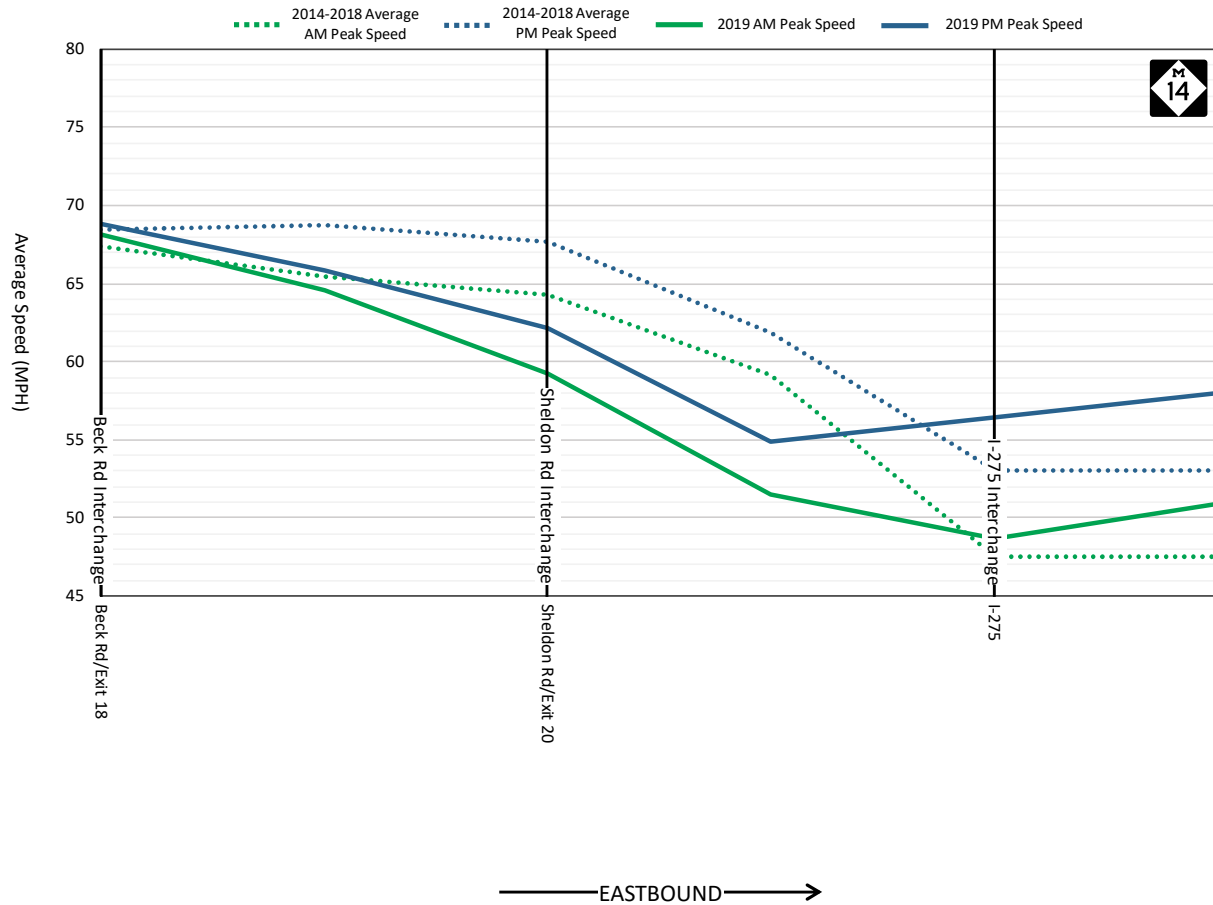
b) Delay Index Graph

FIGURE 84. Taylor TSC M-14 Corridor Delay Index





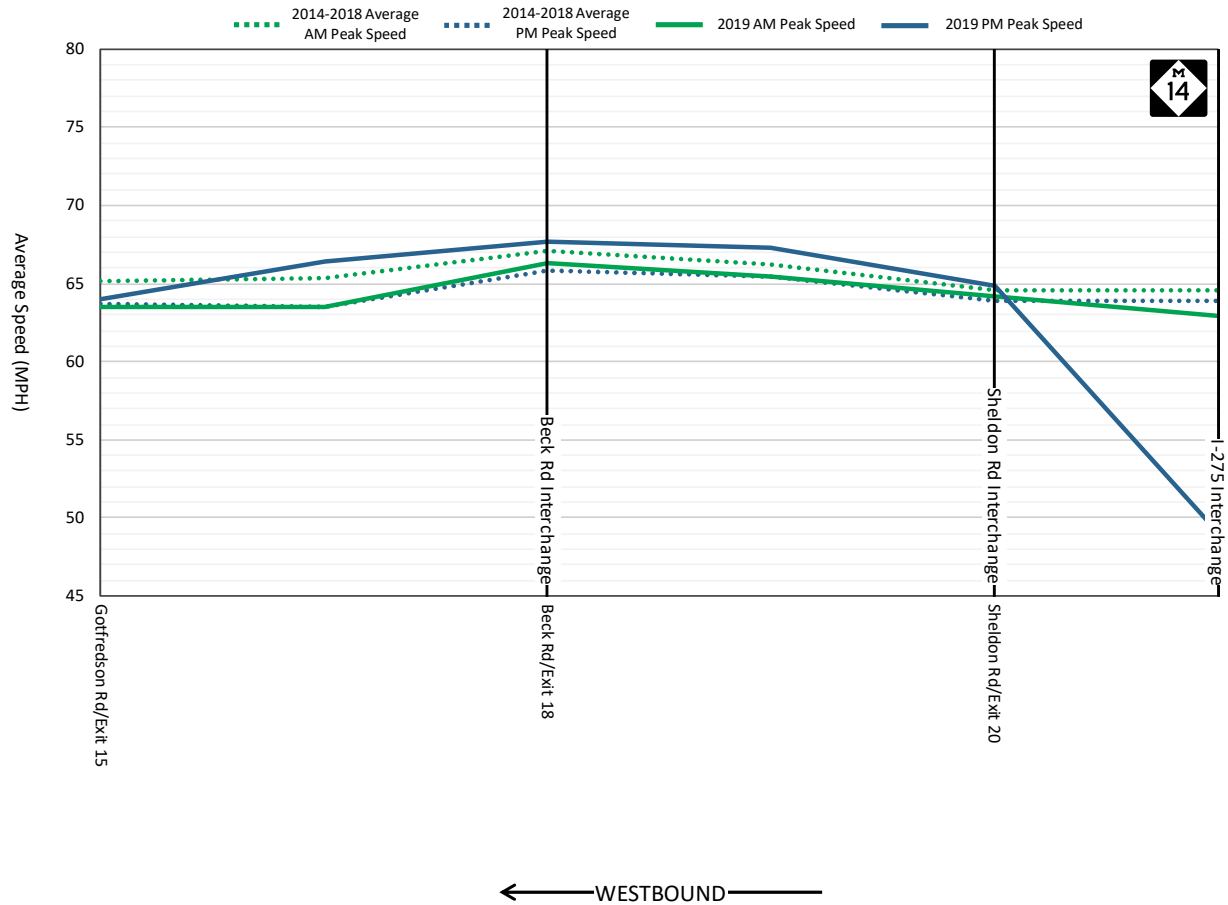
## M-14: AVERAGE SPEED



**FIGURE 85. Metro Region Eastbound M-14 Average Speed**



## M-14: AVERAGE SPEED



**FIGURE 86. Metro Region Westbound M-14 Average Speed**





## M-14: LEVEL OF TRAVEL TIME RELIABILITY

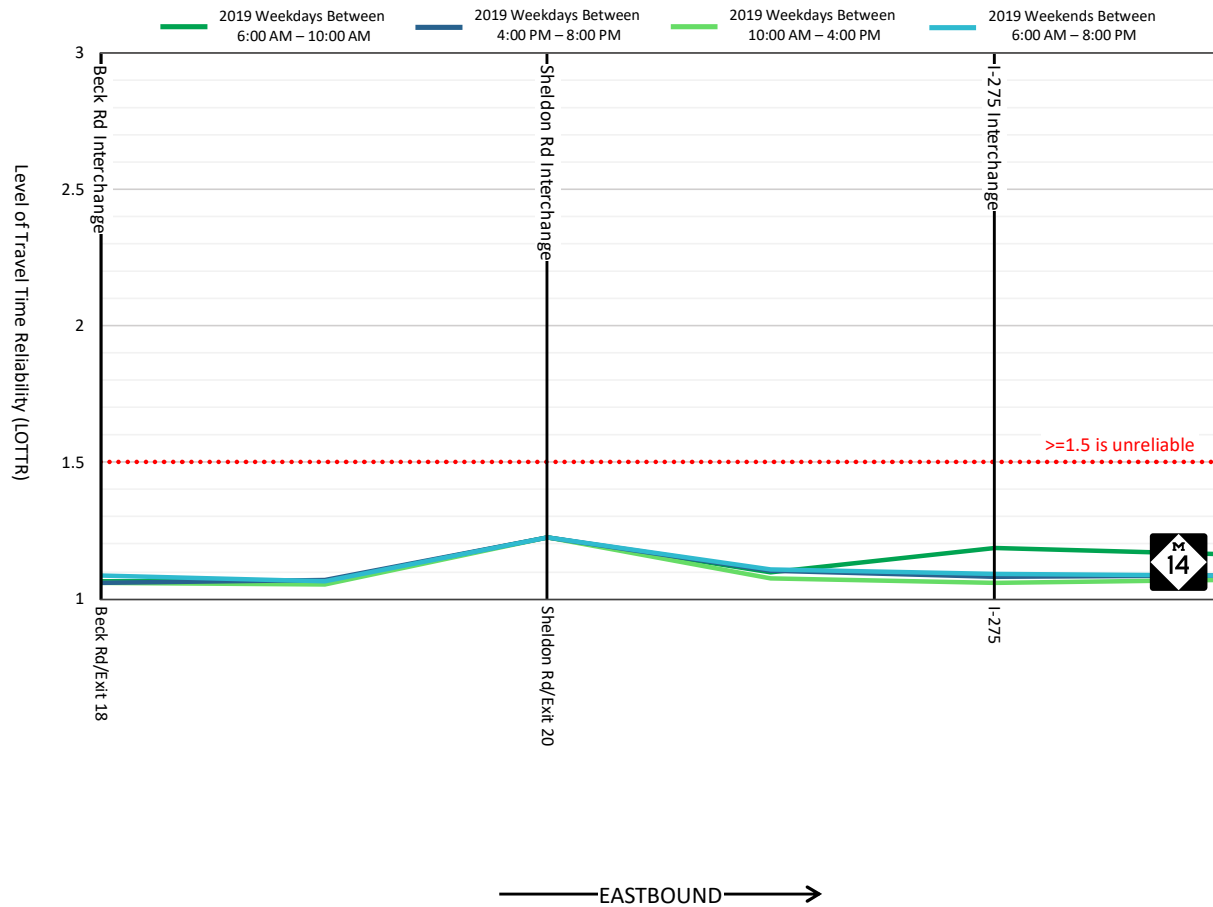
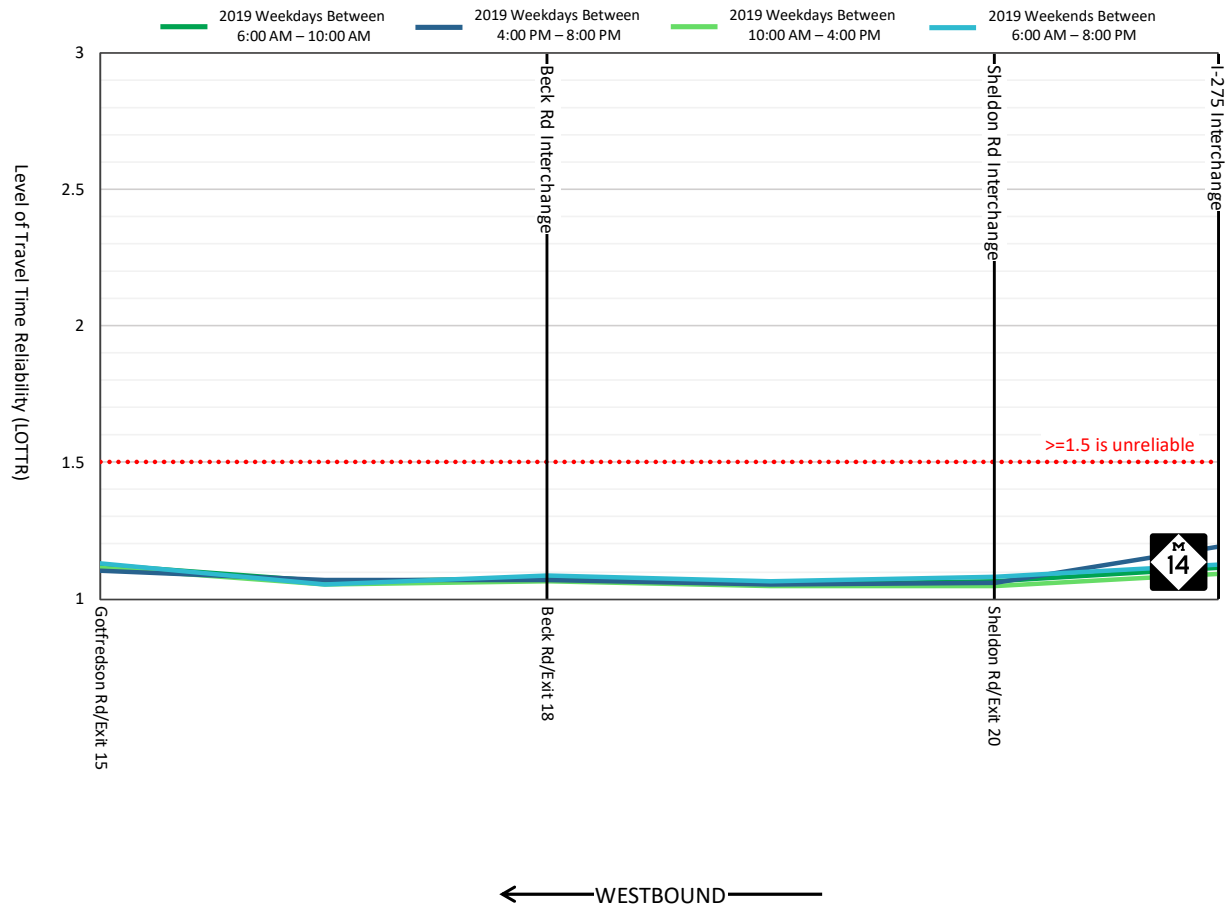


FIGURE 87. Metro Region Eastbound M-14 Level of Travel Time Reliability



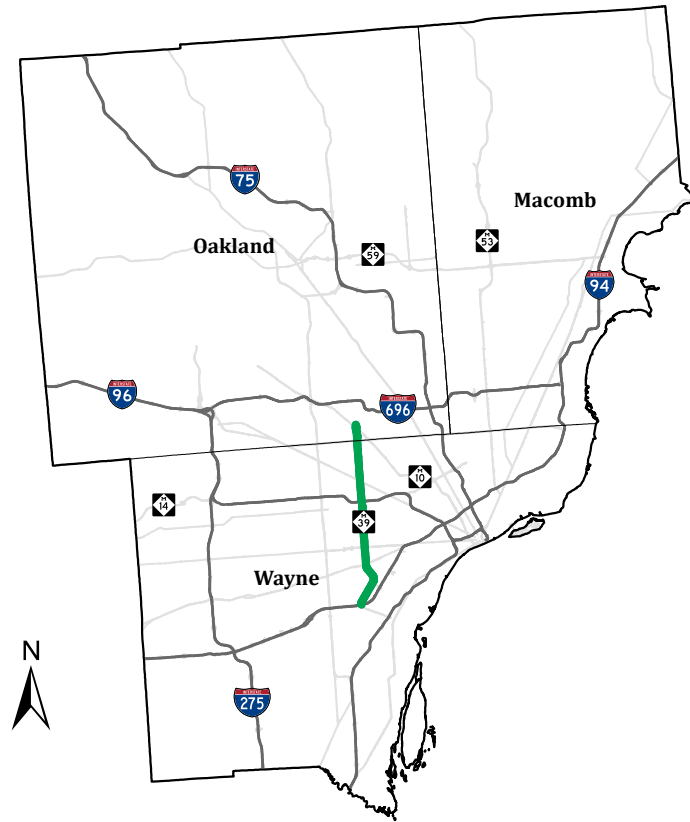
## M-14: LEVEL OF TRAVEL TIME RELIABILITY



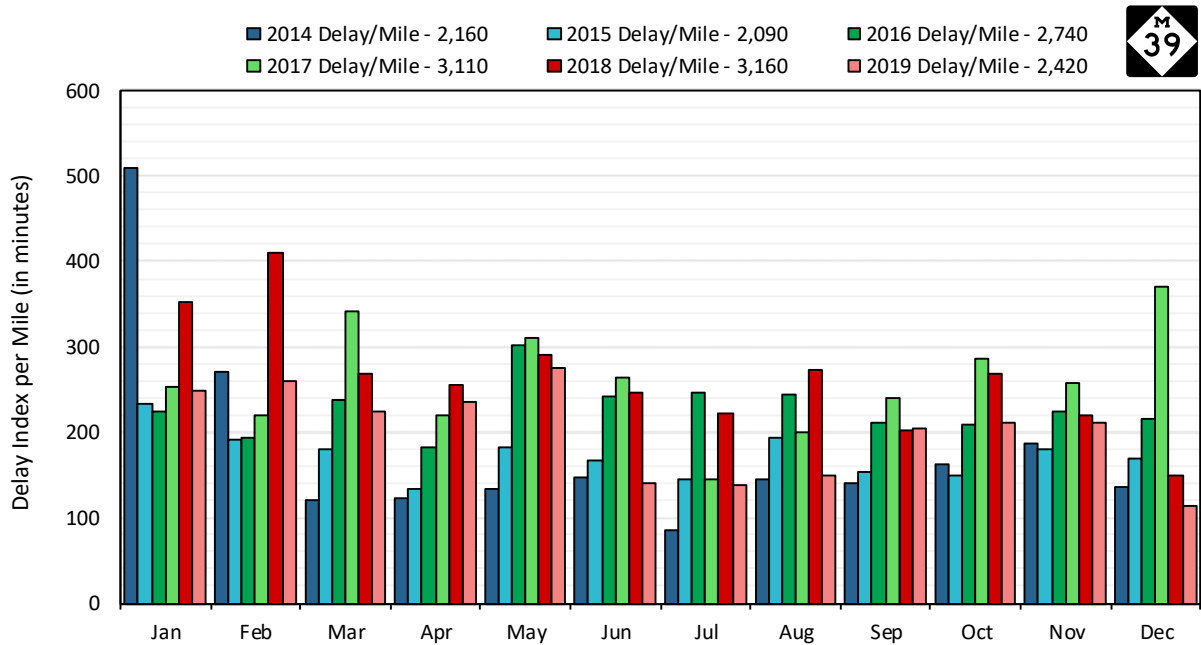
**FIGURE 88. Metro Region Westbound M-14 Level of Travel Time Reliability**



## M-39: DETROIT TSC AND OAKLAND COUNTY DELAY INDEX (55 MPH)



a) Segment Map



b) Delay Index Graph

**FIGURE 89. Detroit TSC and Oakland County (55 MPH) M-39 Corridor Delay Index**





## M-39: AVERAGE SPEED

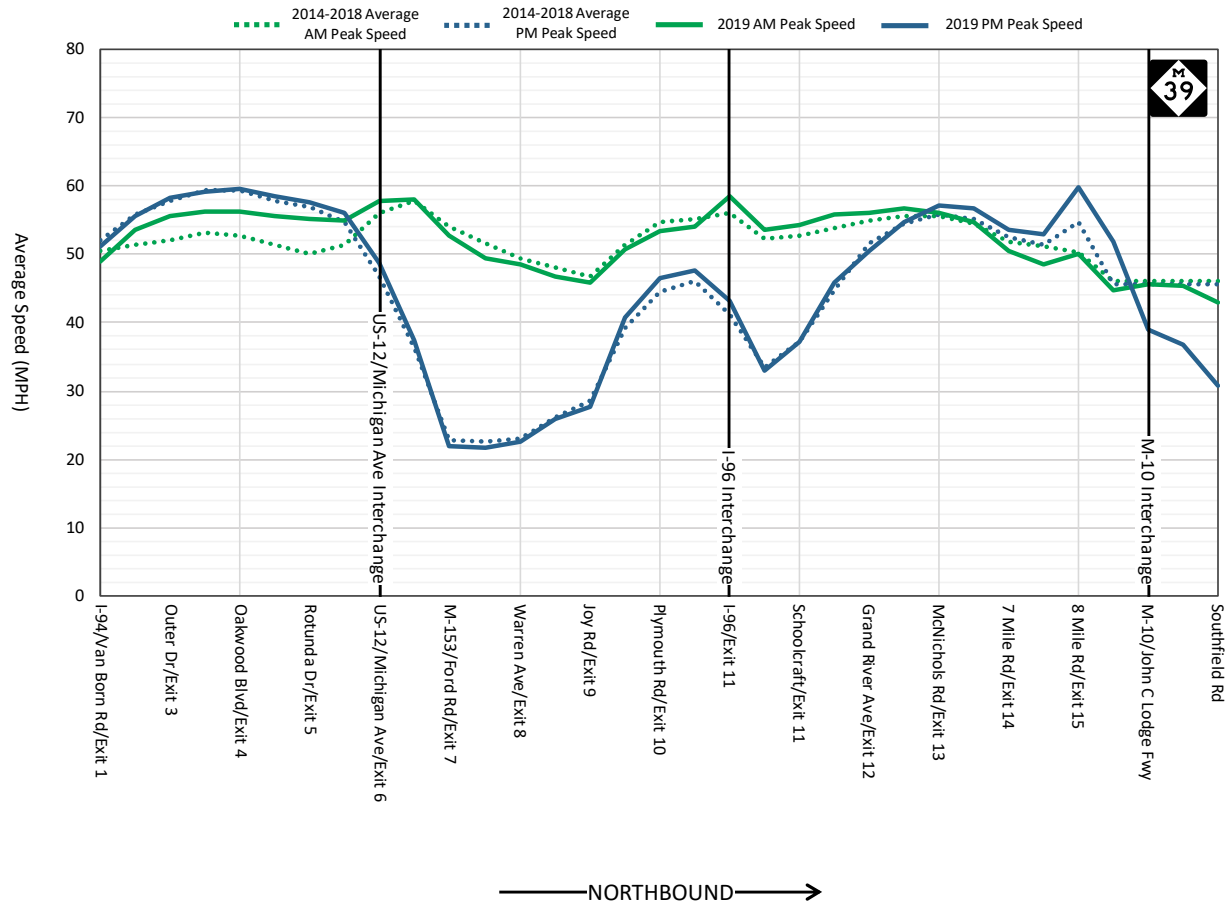
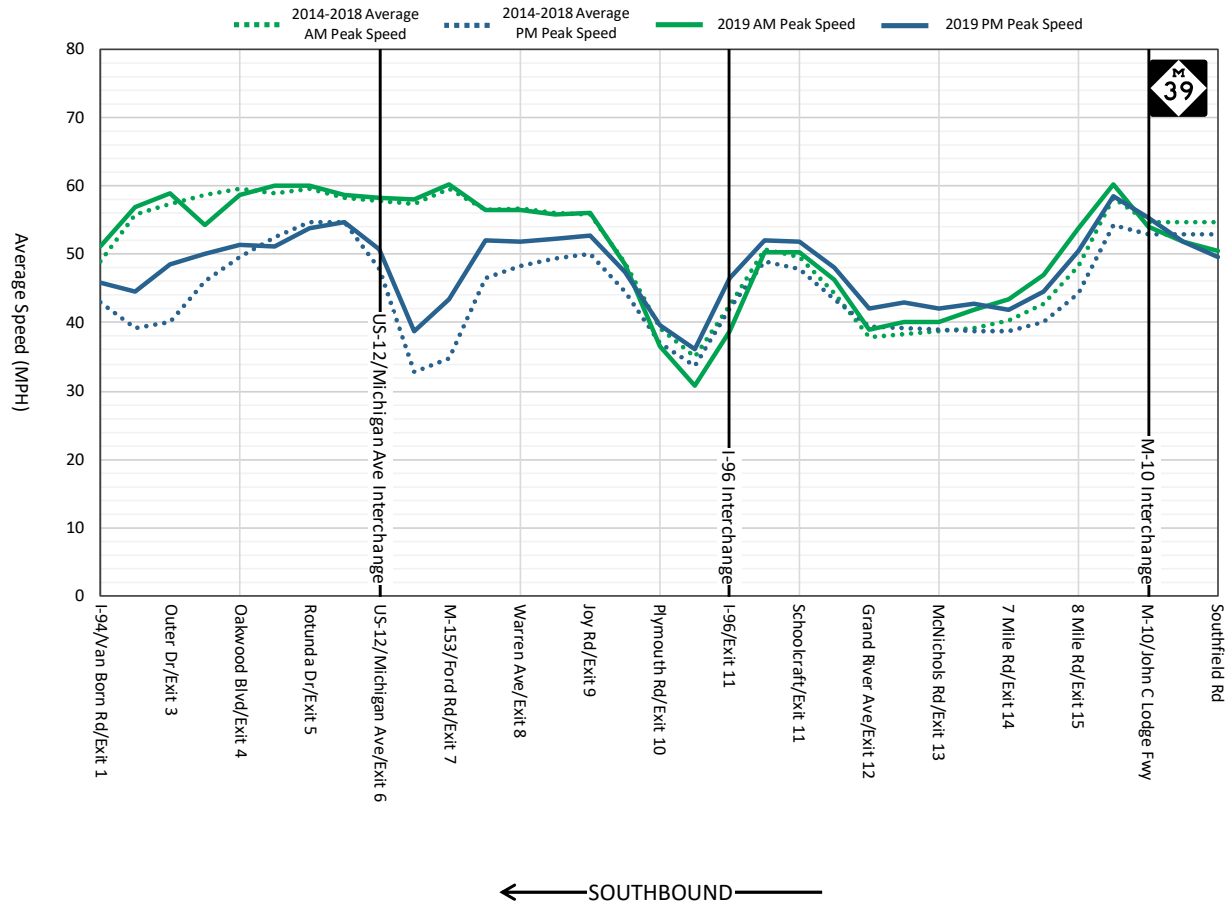


FIGURE 90. Metro Region Northbound M-39 Average Speed



## M-39: AVERAGE SPEED



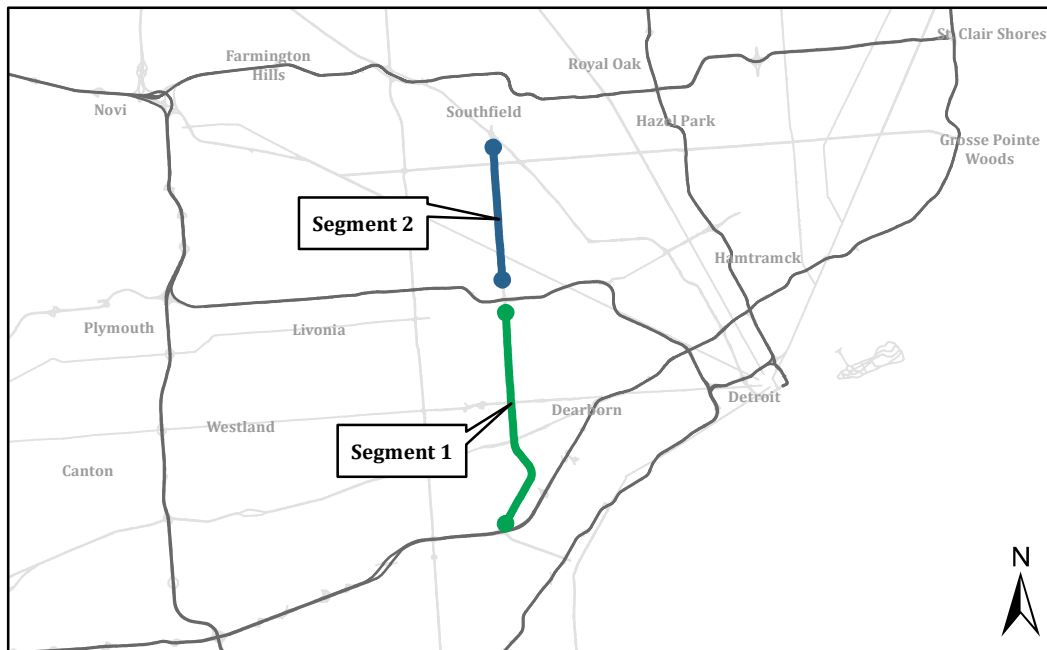
**FIGURE 91. Metro Region Southbound M-39 Average Speed**



## M-39: TRAVEL TIME RELIABILITY



a) Metro Region

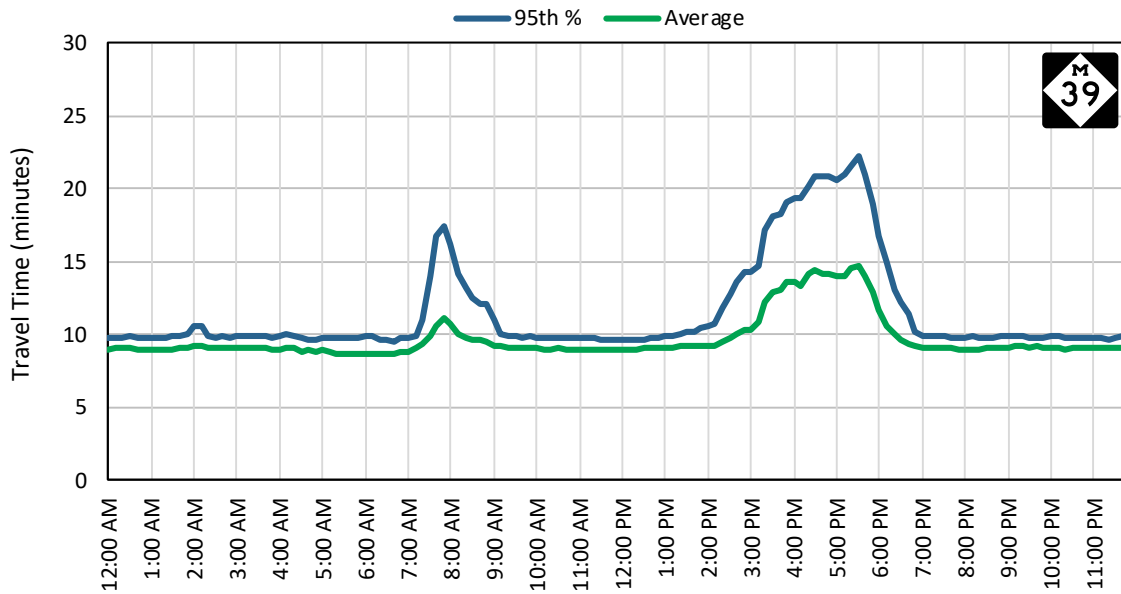


b) Detroit, Michigan

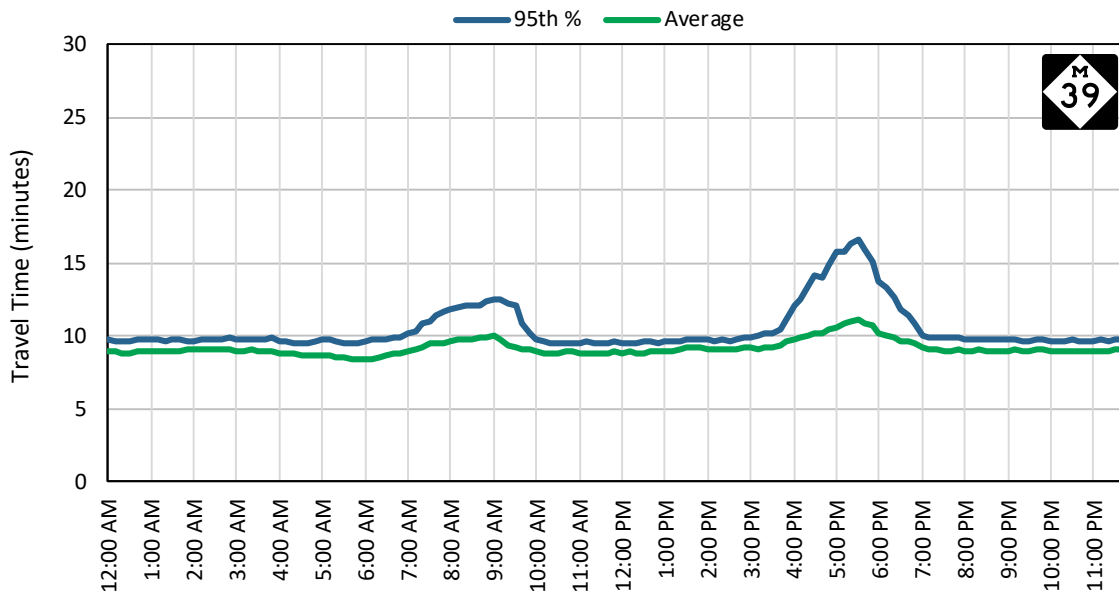
**FIGURE 92. Travel Time Reliability: M-39**



## M-39: TRAVEL TIME RELIABILITY



a) Northbound

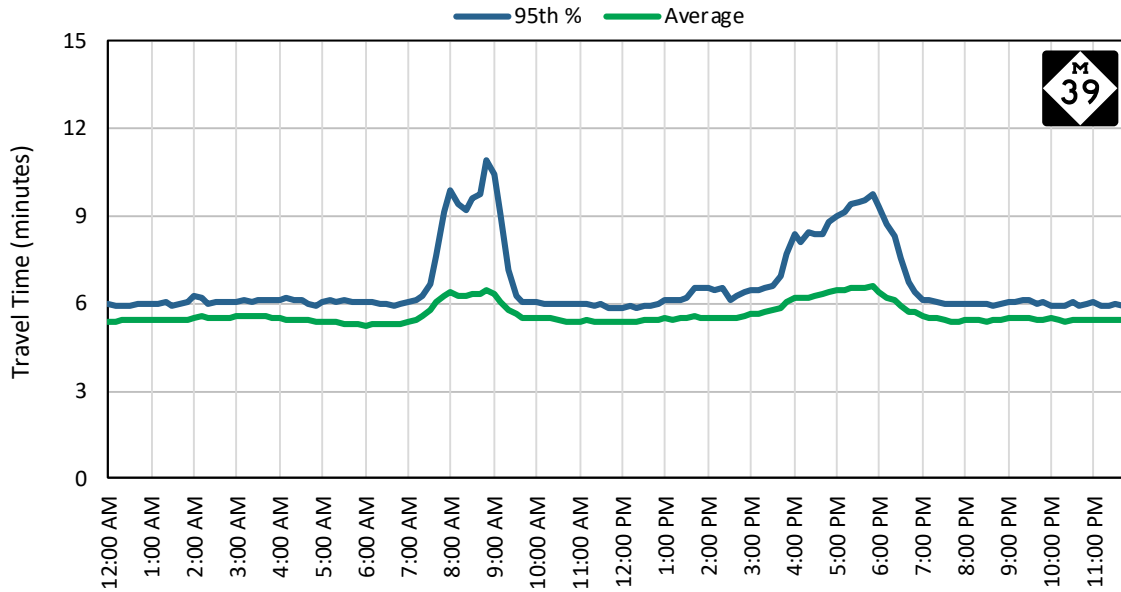


b) Southbound

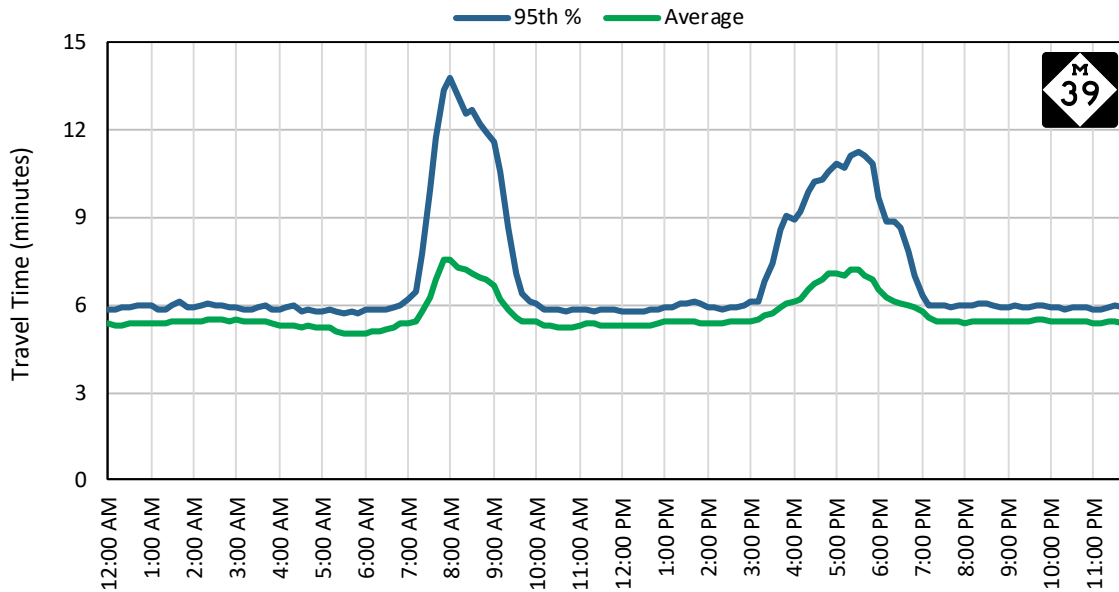
**FIGURE 93.** Segment 1 - M-39 between I-94/Van Born Rd/Exit 1 and I-96/Exit 11



## M-39: TRAVEL TIME RELIABILITY



a) Northbound



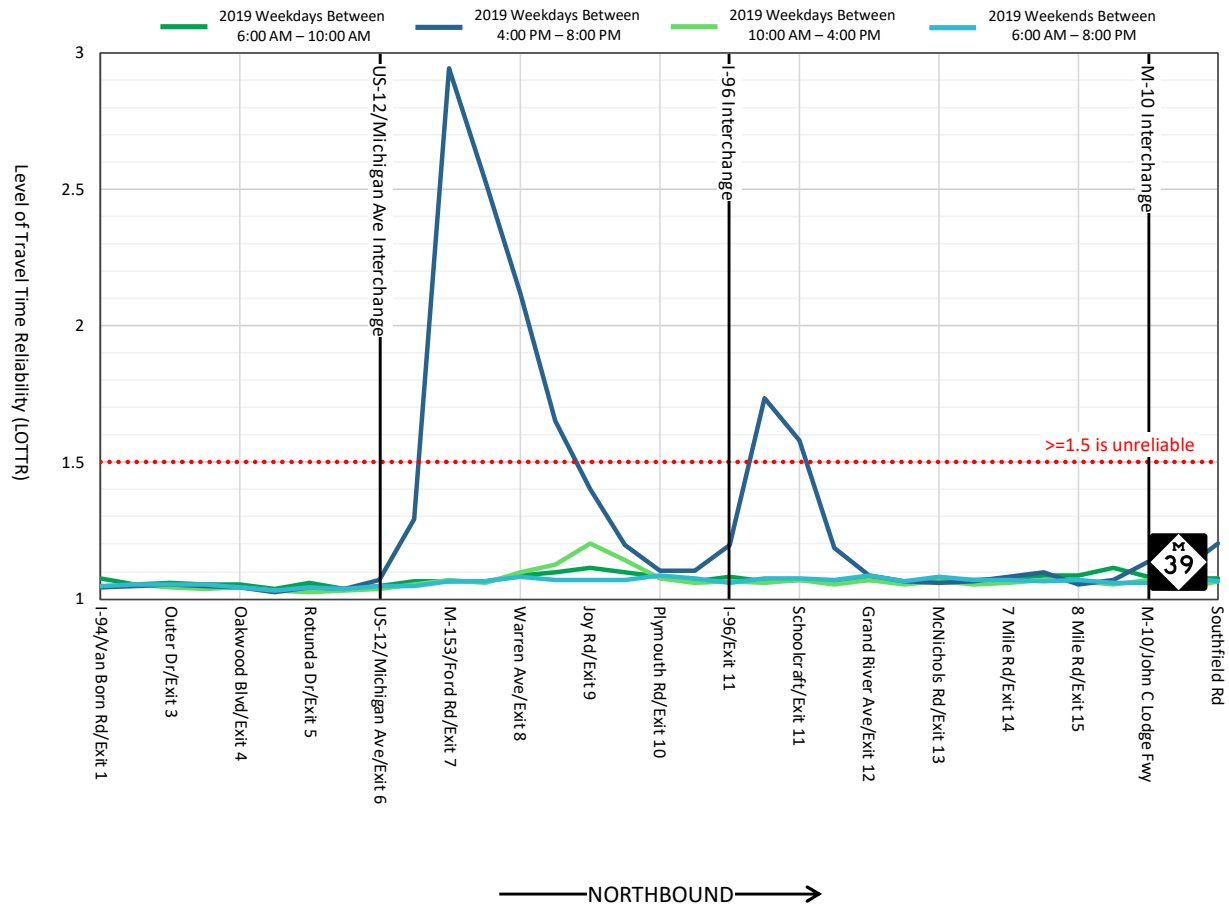
b) Southbound

**FIGURE 94.** Segment 2 - M-39 between I-96/Exit 11 and Southfield Rd





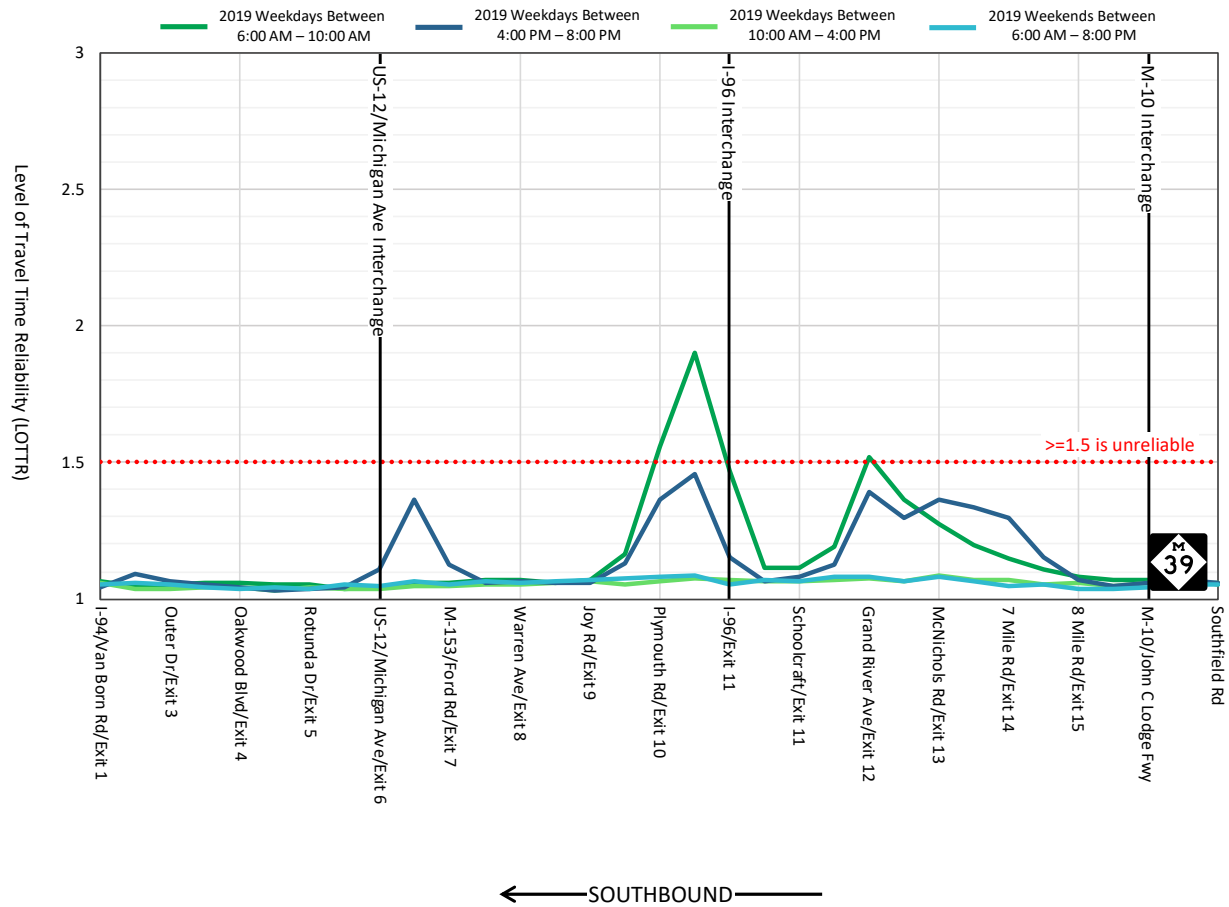
## M-39: LEVEL OF TRAVEL TIME RELIABILITY



**FIGURE 95. Metro Region Northbound M-39 Level of Travel Time Reliability**



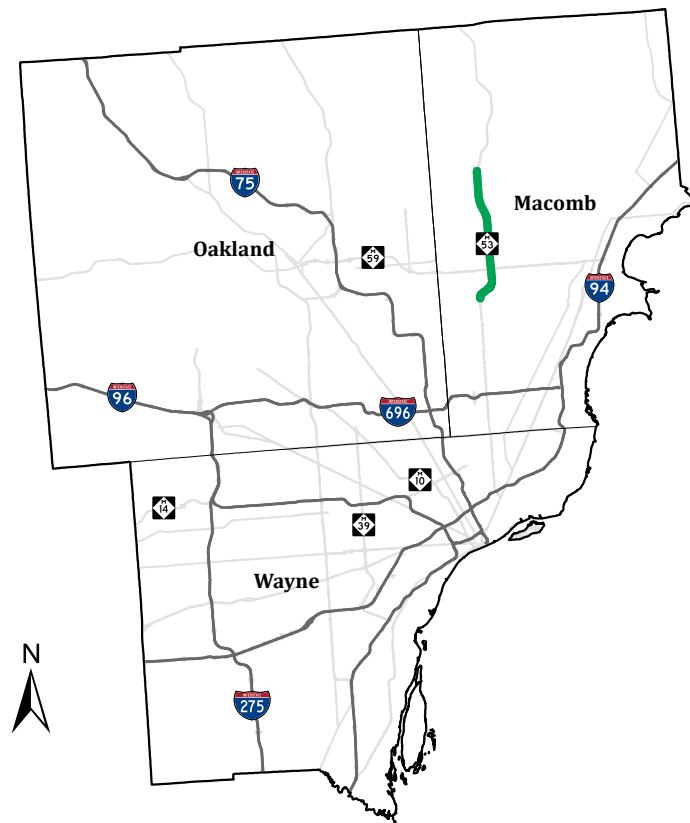
## M-39: LEVEL OF TRAVEL TIME RELIABILITY



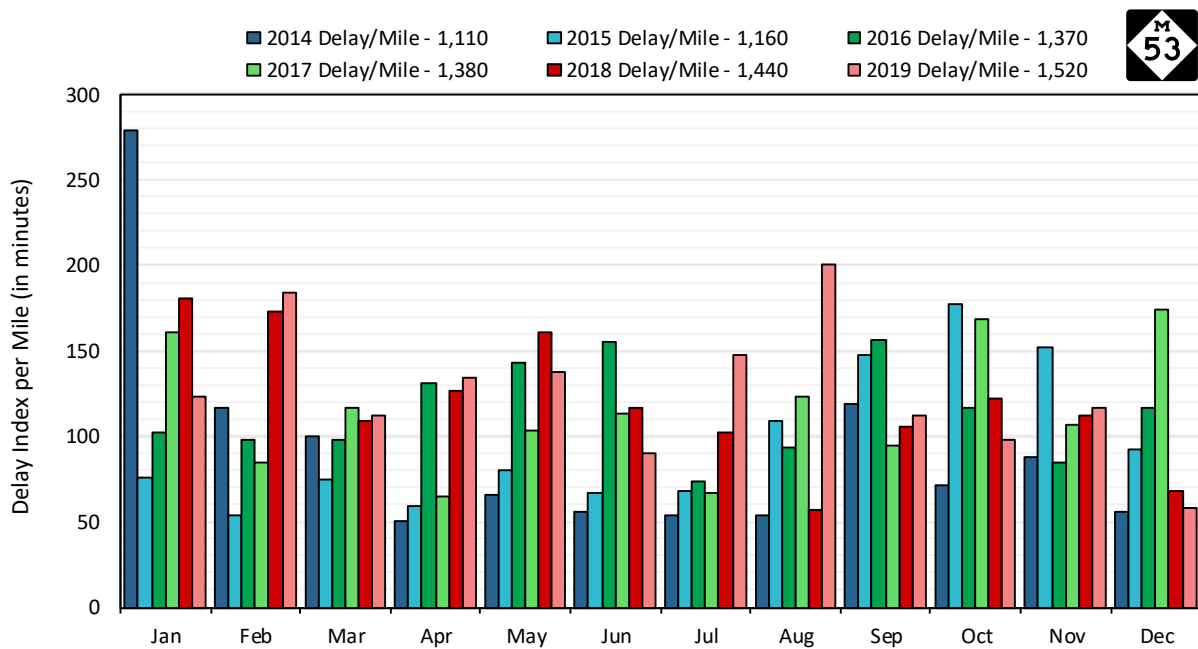
**FIGURE 96. Metro Region Southbound M-39 Level of Travel Time Reliability**



## M-53: MACOMB COUNTY DELAY INDEX



a) Segment Map

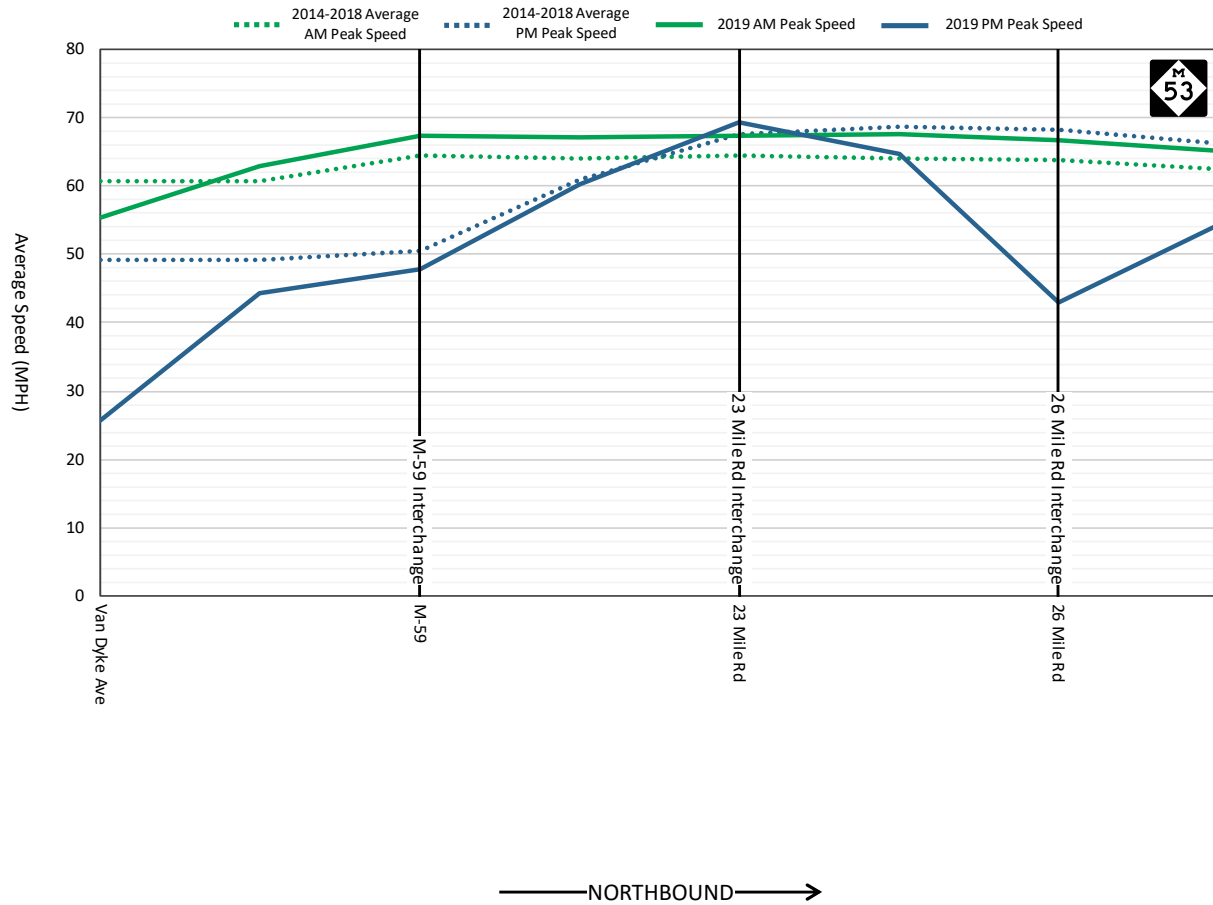


b) Delay Index Graph

FIGURE 97. Macomb County M-53 Corridor Delay Index



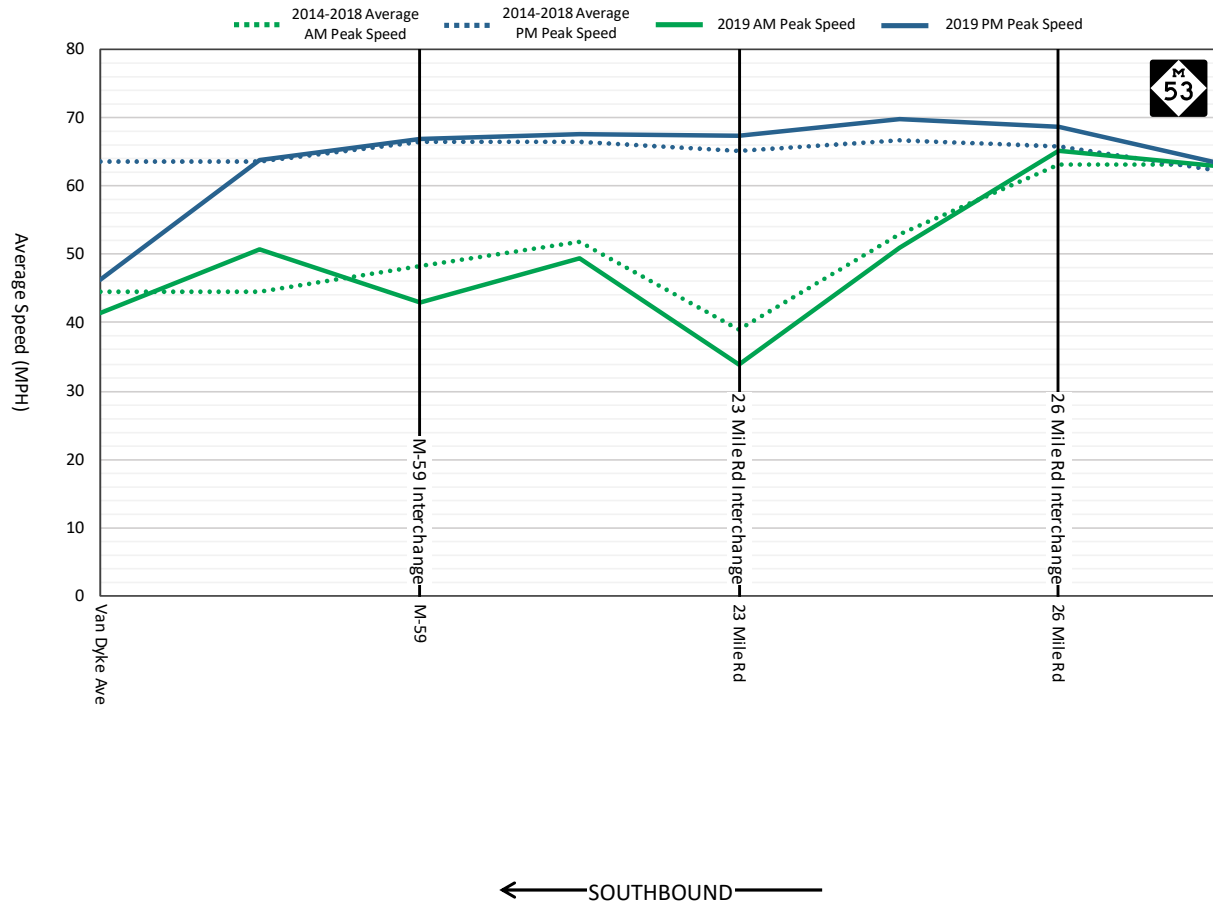
## M-53: AVERAGE SPEED



**FIGURE 98. Metro Region Northbound M-53 Average Speed**



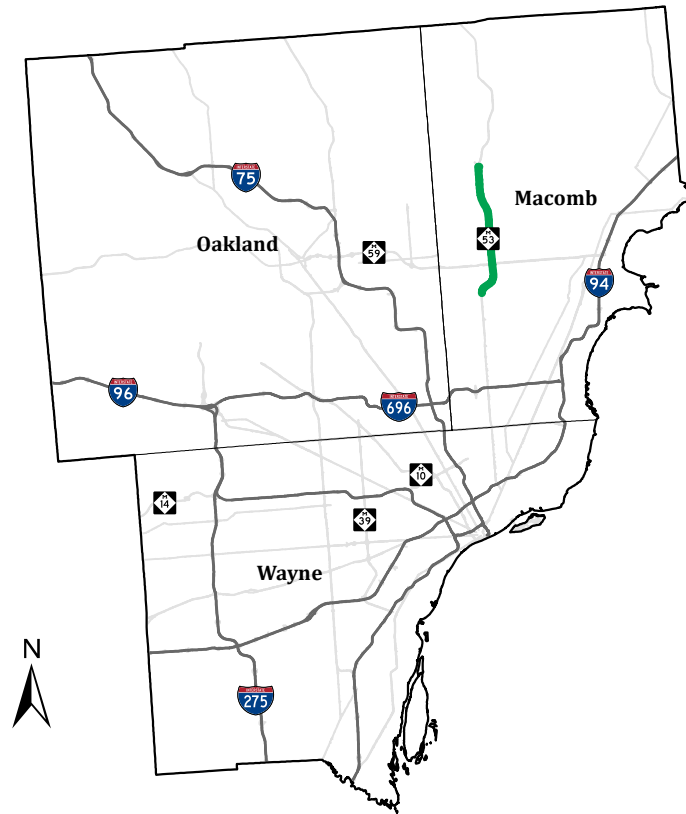
## M-53: AVERAGE SPEED



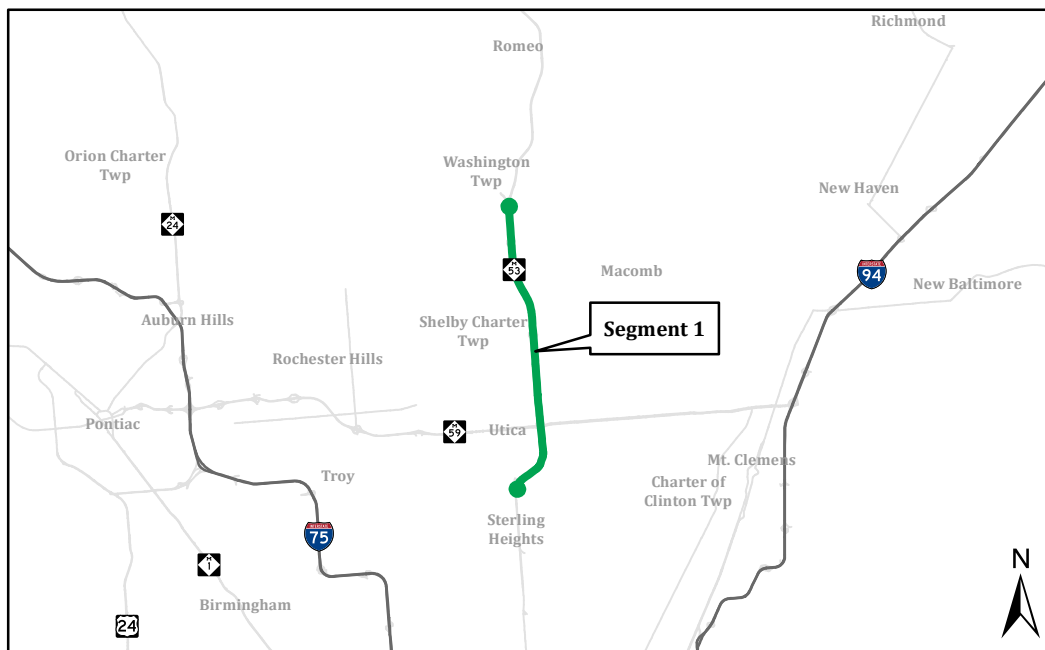
**FIGURE 99. Metro Region Southbound M-53 Average Speed**



## M-53: TRAVEL TIME RELIABILITY



a) Metro Region

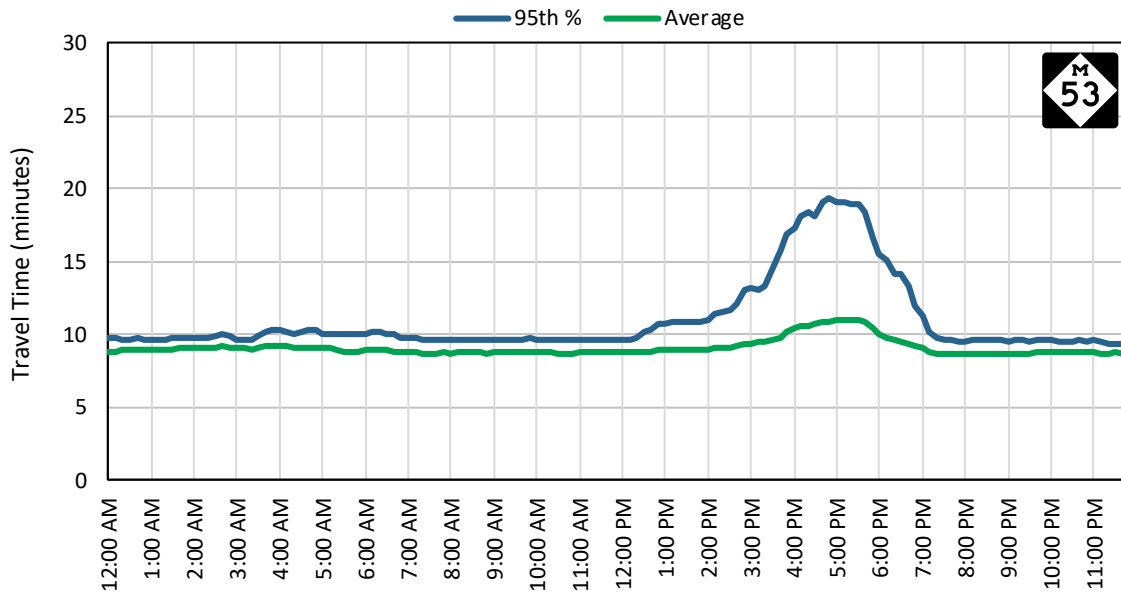


b) Detroit, Michigan

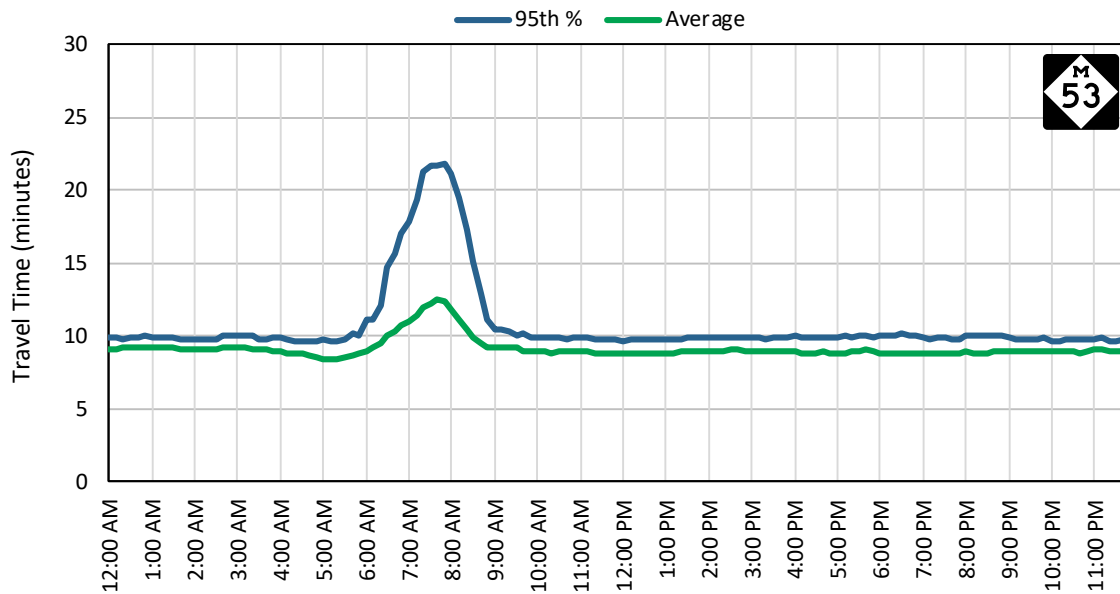
**FIGURE 100. Travel Time Reliability: M-53**



## M-53: TRAVEL TIME RELIABILITY



a) Northbound



b) Southbound

**FIGURE 101.** Segment 1 - M-53 between Van Dyke Rd and Van Dyke Ave



## M-53: LEVEL OF TRAVEL TIME RELIABILITY

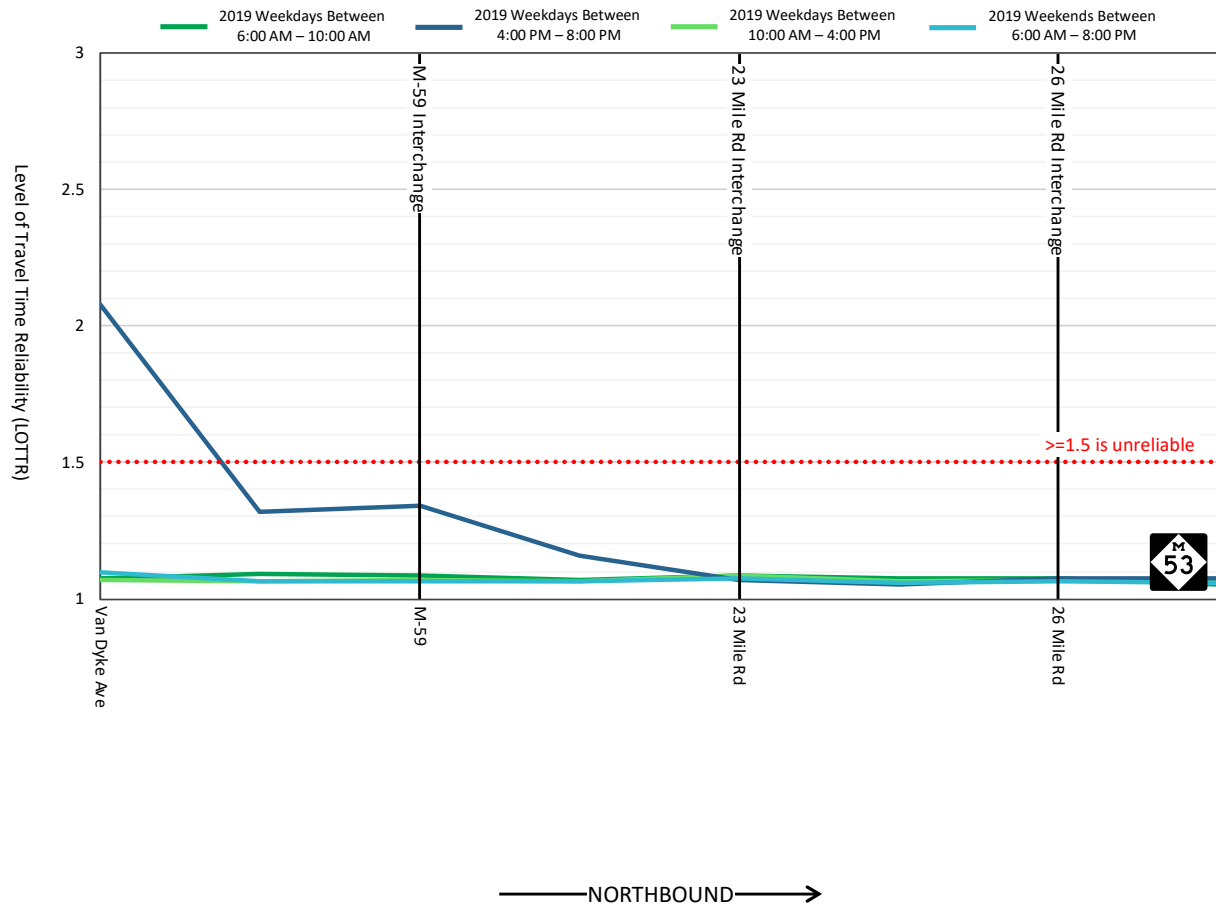


FIGURE 102. Metro Region Northbound M-53 Level of Travel Time Reliability





## M-53: LEVEL OF TRAVEL TIME RELIABILITY

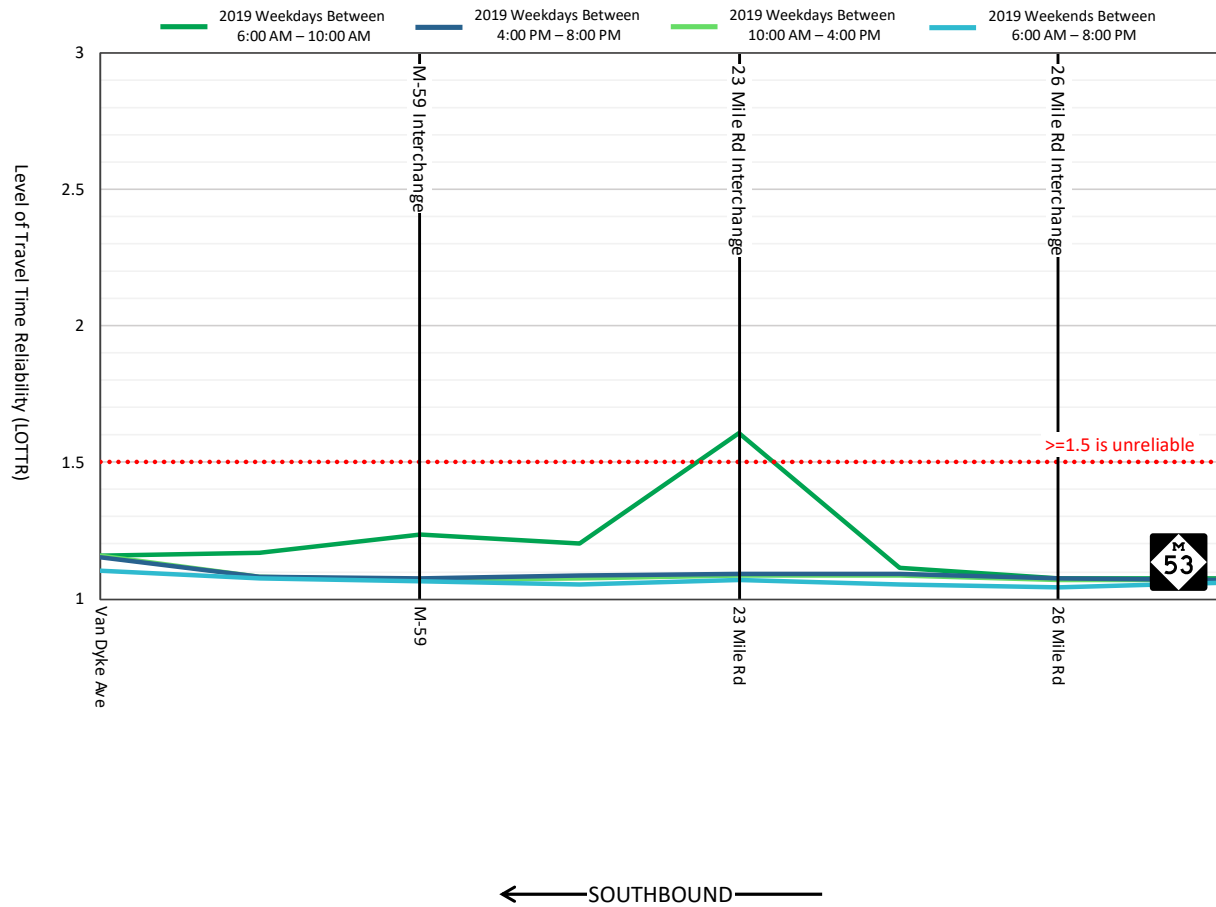
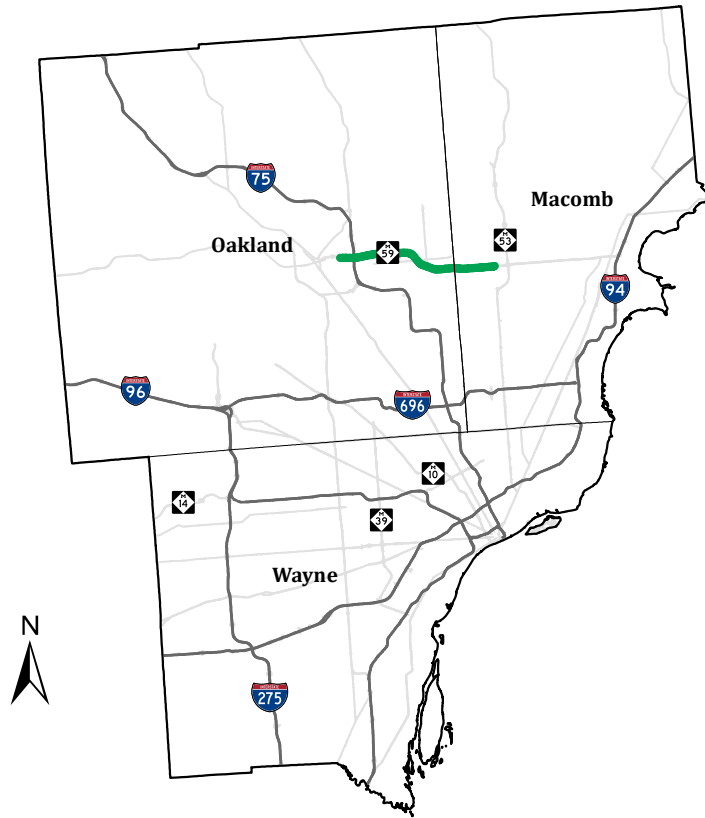


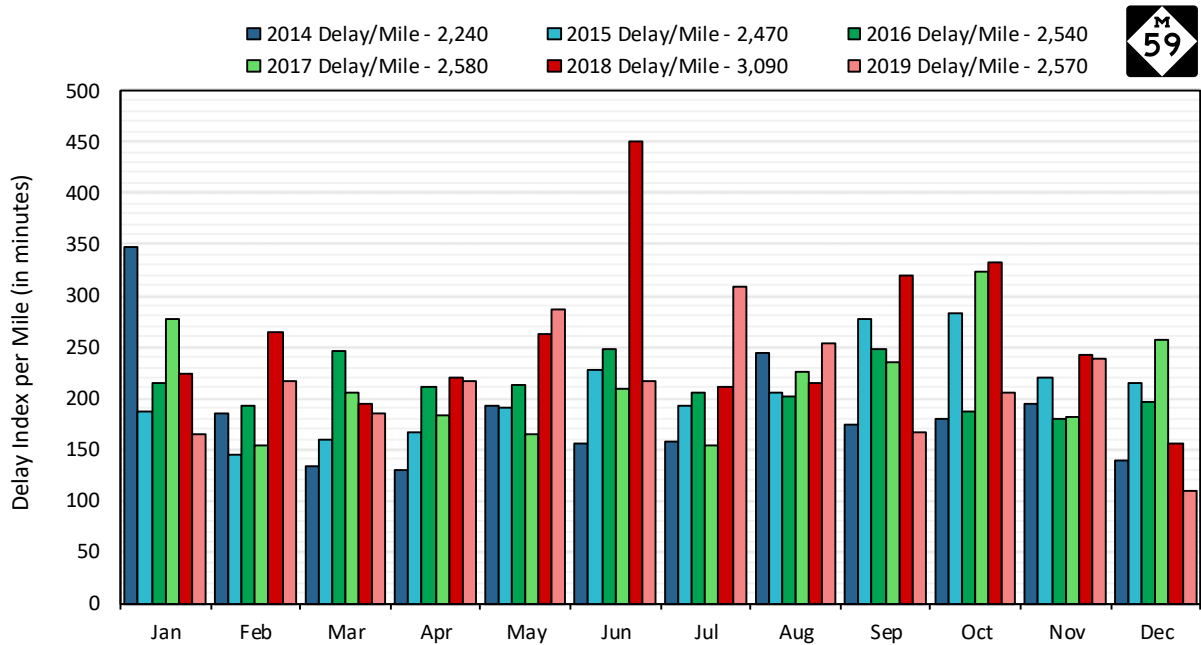
FIGURE 103. Metro Region Southbound M-53 Level of Travel Time Reliability



## M-59: OAKLAND AND MACOMB COUNTY DELAY INDEX



a) Segment Map

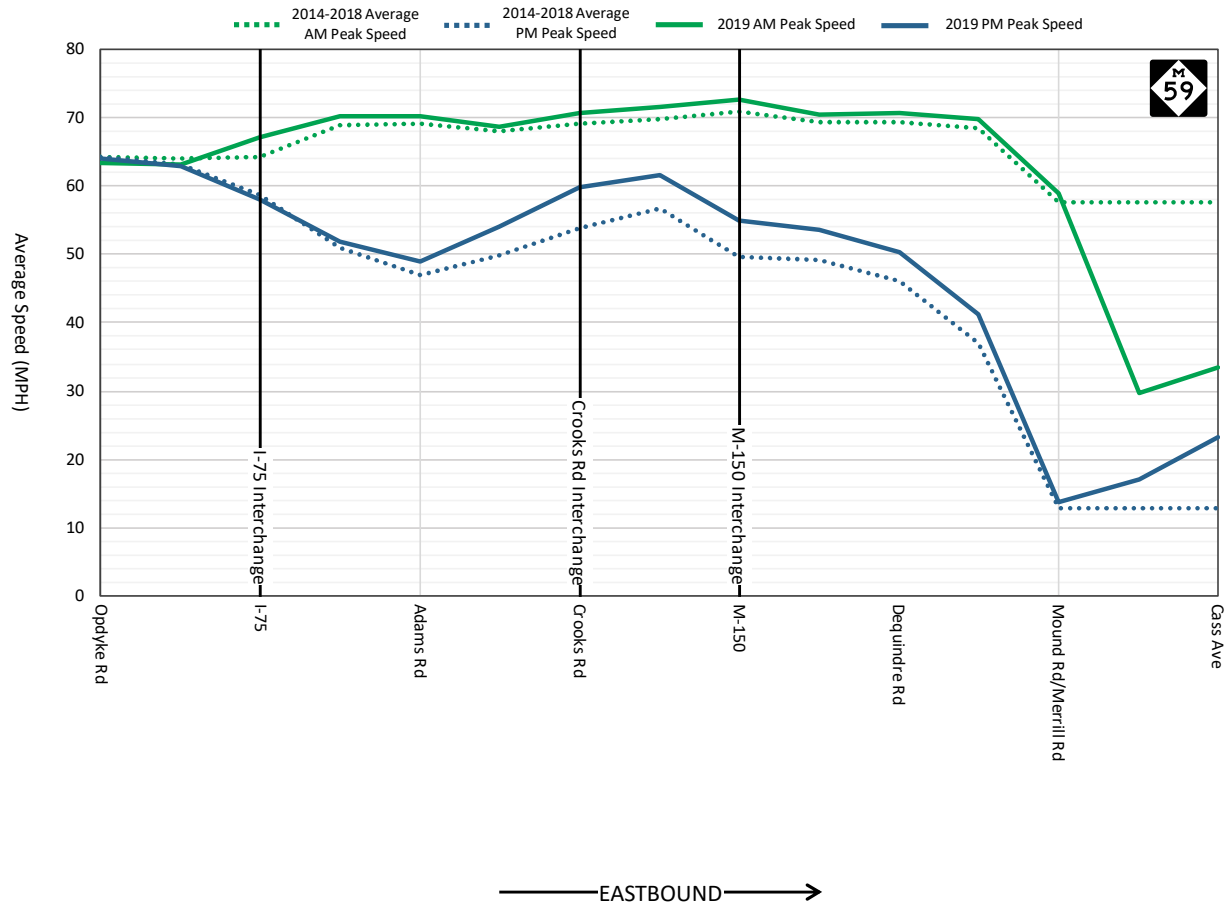


b) Delay Index Graph

FIGURE 104. Oakland and Macomb County M-59 Corridor Delay Index



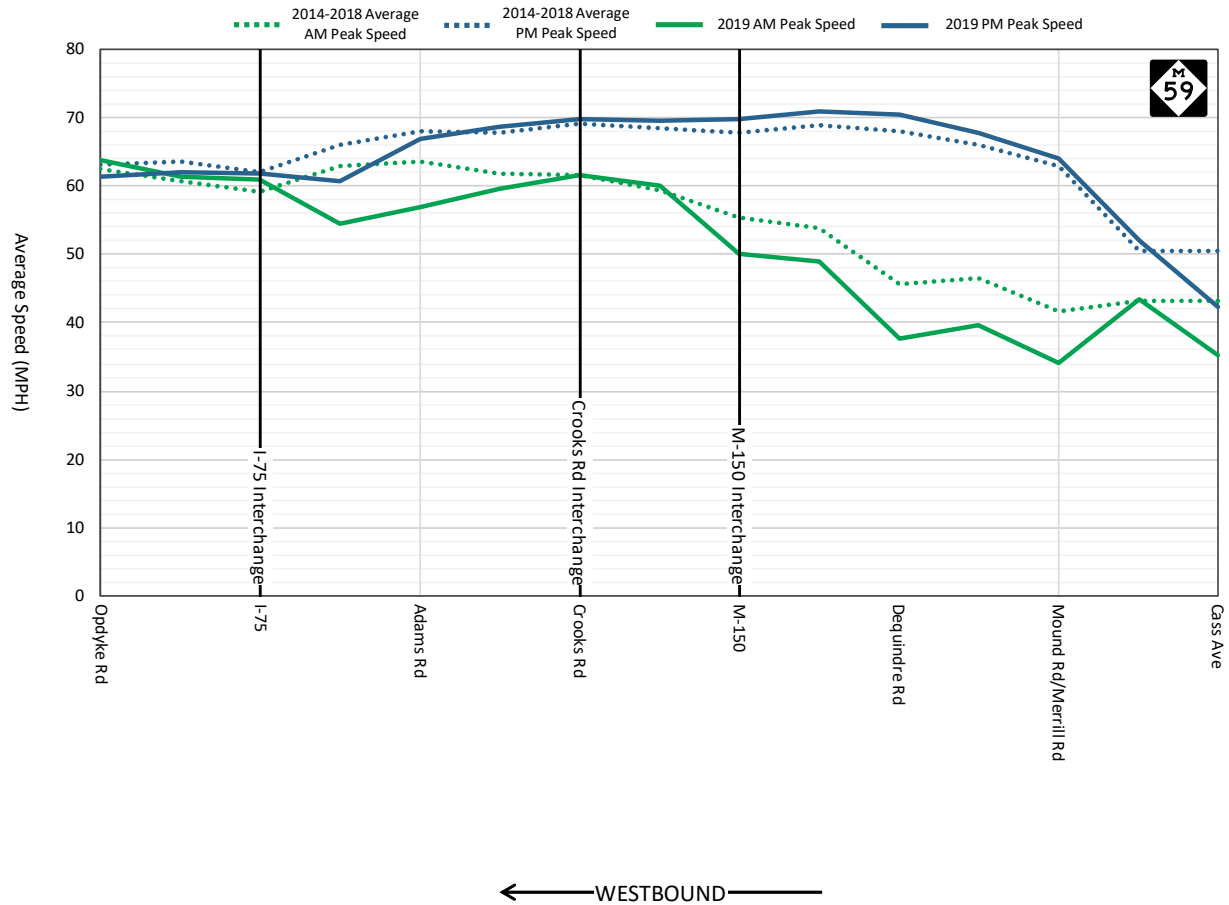
## M-59: AVERAGE SPEED



**FIGURE 105. Metro Region Eastbound M-59 Average Speed**



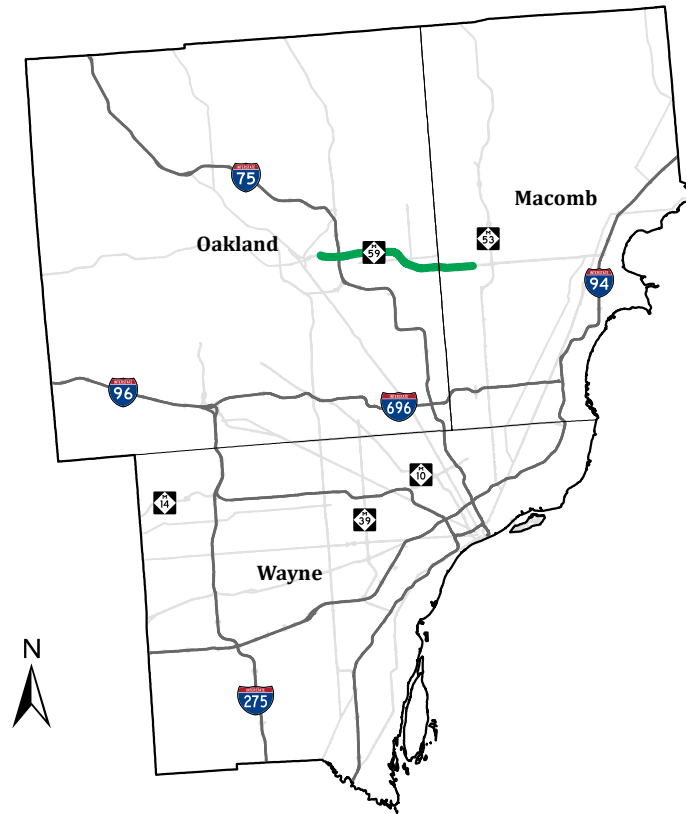
## M-59: AVERAGE SPEED



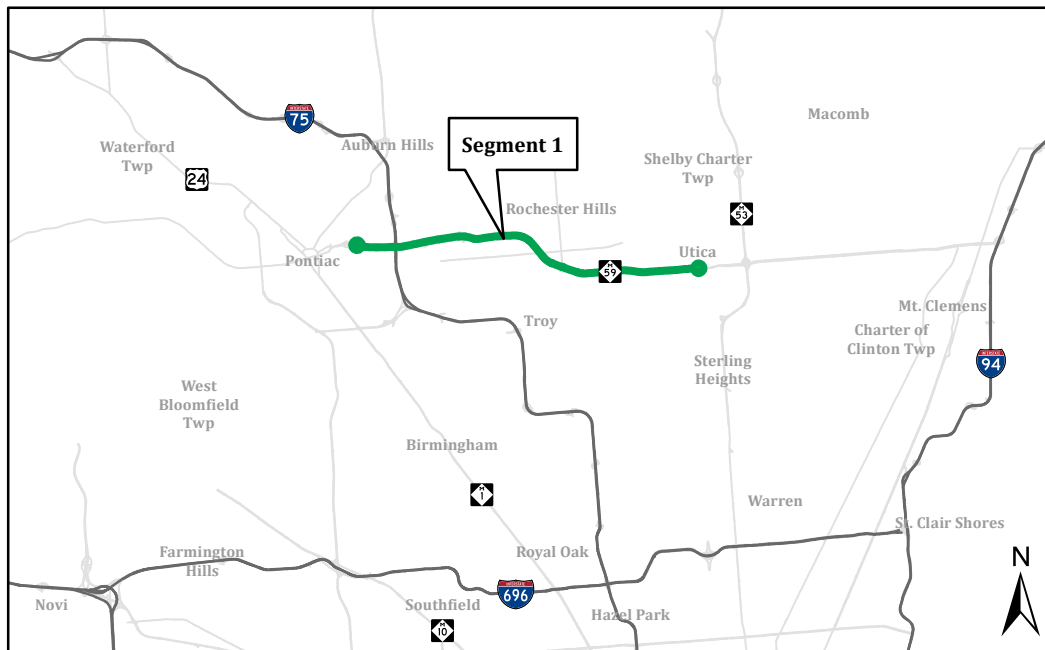
**FIGURE 106. Metro Region Westbound M-59 Average Speed**



## M-59: TRAVEL TIME RELIABILITY



a) Metro Region

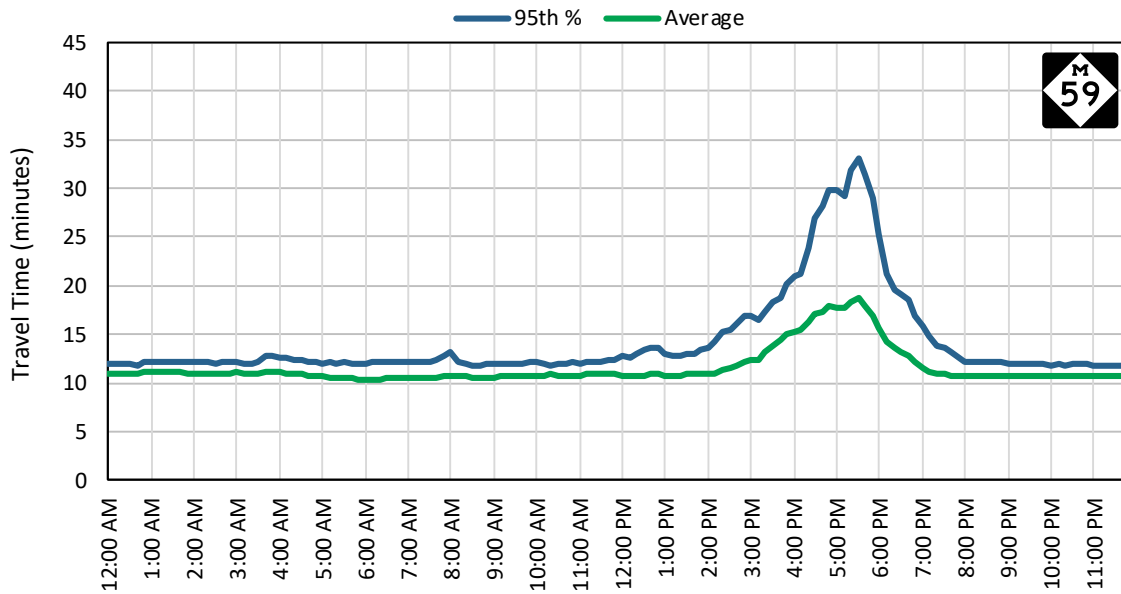


b) Pontiac, Michigan

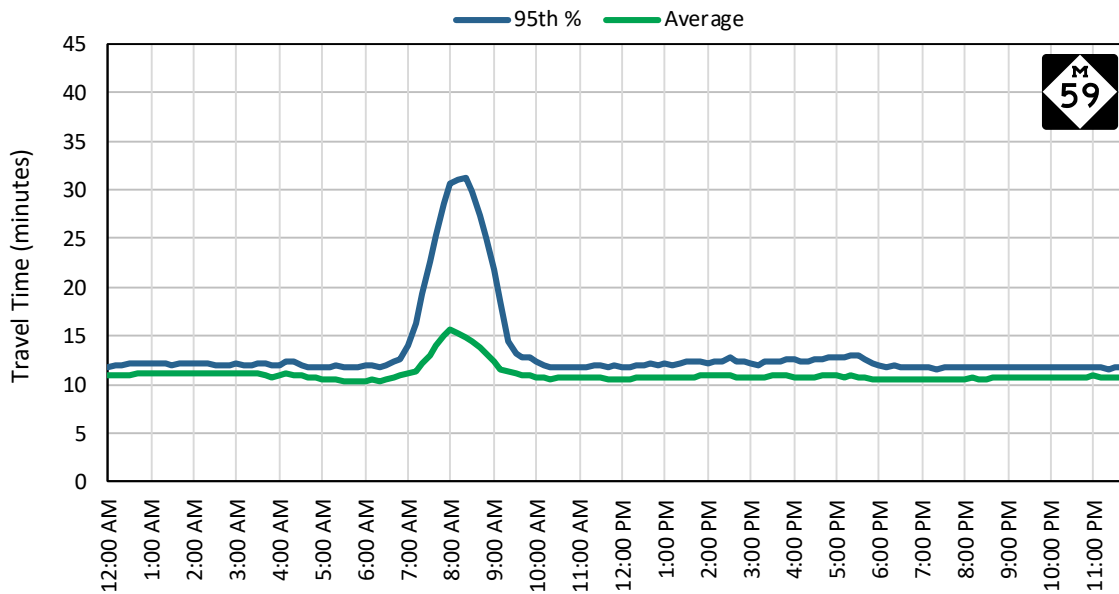
**FIGURE 107. Travel Time Reliability: M-59**



## M-59: TRAVEL TIME RELIABILITY



a) Eastbound

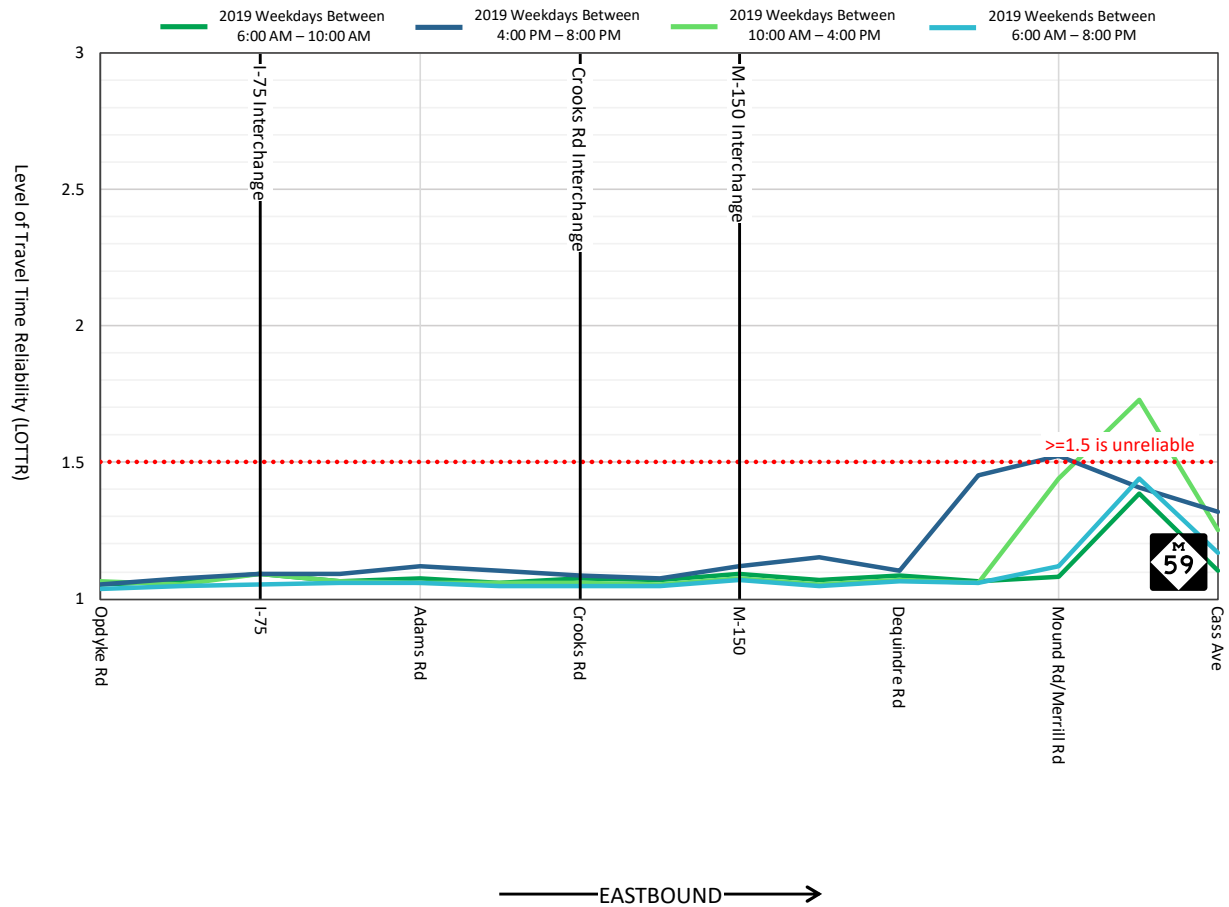


b) Westbound

**FIGURE 108.** Segment 1 - M-59 between Van Dyke Ave and MLK Jr Blvd



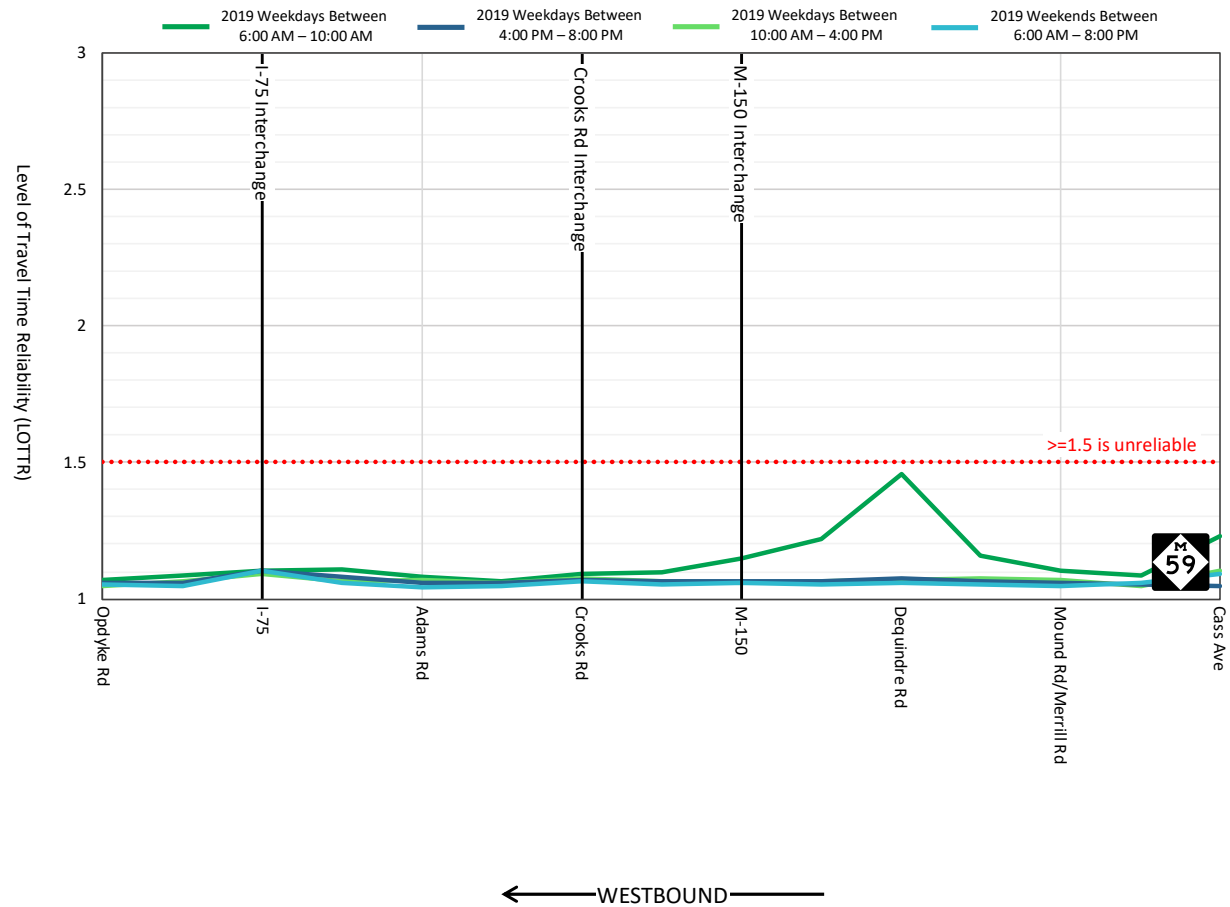
## M-59: LEVEL OF TRAVEL TIME RELIABILITY



**FIGURE 109. Metro Region Eastbound M-59 Level of Travel Time Reliability**



## M-59: LEVEL OF TRAVEL TIME RELIABILITY



**FIGURE 110. Metro Region Westbound M-59 Level of Travel Time Reliability**





## CONCLUSION

This chapter summarizes the performance of the Metro Region. It is the Congestion and Reliability Unit's goal that these performance measures are not just numbers and figures, but information to help MDOT personnel understand how traffic is operating on its freeways and make actionable decisions on improving traffic. These metrics could be used to help prioritize projects, determine where and when problems are occurring, and how significant these problems are. We intend to provide these performance measures on an annual basis to help identify trends on the system and to keep MDOT up to date on freeway operations. Various performance measures may change due to changing federal requirements or MDOT needs. As probe data improves, this may expand to non-freeway routes as well. The Congestion and Reliability Unit welcomes any feedback on this report to help us improve it in the future and maximize its usefulness.

## CONTACT INFORMATION

Please contact the Congestion and Reliability Unit if you have any questions/comments or would like to have the actual data for further analysis.

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